PERIODICAL DIV. AUG 23 1907 LIBRARY

The American Artisan
And Hardware Record

Vol. 54. No. 8. CHICAGO, AUGUST 24, 1907. $2.00 Per Year.

BOLTS

Of All Kinds. Nuts, Washers and Carriage Forgings.

COLUMBUS BOLT WORKS, COLUMBUS, — OHIO —

IN THE FRONT RANK FOR 25 YEARS

"AMERICAN SEAL"

ELASTIC OIL ROOFING CEMENT
STOVE PUTTY and ASBESTOS
FURNACE CEMENT

and the superior quality of these goods is still universally recognized.

THE WM. CONNORS PAINT MFG. COMPANY
MAKERS
TROY, N. Y.

Western Agent
FRIEDLEY-VOSHARDT CO.
194-204 Mather Street Chicago, Ill.

Southwestern Agent
STOCKHOFF SUPPLY COMPANY
107 N. Main St., St. Louis, Mo.

TRYING to do business without advertising is like winking at a girl in the dark; you know what you are doing but nobody else does.

NEW DESIGN WORLD'S BEST
TUBULAR TRACK DOOR HANGER

We have increased the diameter of the wheel to 2¼ in., making it the easiest running hanger on the market.
The supplementary wheel prevents derailment. Frame is made of best grade malleable iron. Finished in Aluminum and each pair packed in an individual box, complete with bolts. The track brackets are slidable and may be placed at any point desired. We do not sell catalog houses. Write for prices.

SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio Hamilton, Ont., Can.

U. S. CLOTHES PINS

Never rust, smut, split, or blow off the line.

Any special clips made to order.

V. S. CLOTHES PIN COMPANY
Montpelier, Vt., U. S. A.

DELTA FILES DELTA FILES

FILES OF QUALITY

DELTA FILES

Lest You Forget—We Say It Yet

TRADE MARK DELTA

DELTA FILES

CARVER FILE CO., - Philadelphia, Pa.
An independent organization not connected with the trust in any form, shape or manner.

CHAIN—Furnace, Damper or Ventilator

"TRIUMPH"

ELEVEN times as strong as Jack Chain.
CUTS ARE EXACT SIZE

"BROWN"

CHEAPEST because they are the BEST

STRONGEST Chain in the World.

"Triumph" or "Brown"
MADE IN EITHER
Steel or Brass.
GET OUR PRICES.

MADE ONLY BY **THE BRIDGEPORT CHAIN CO., Bridgeport, Conn.**

"Shake the Fire Only Half as Much"

The CINDERELLA Air Tight

Can Now Be Furnished With

The Vertical Blast Fire Pot

The only Hot Blast FirePot in which the Iron is of an even thickness at every point.

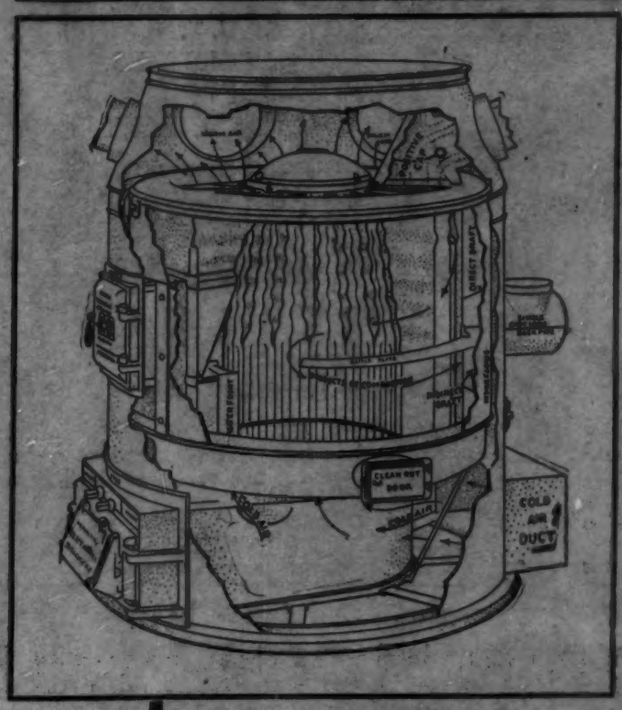
This feature overcomes the tendency to fire crack—a weakness which has been common to Hot Blast Fire Pots.

The Vertical Blast Fire Pot is as durable as a solid simple fire pot and as efficient as the best you have ever seen.

"YOU SHAKE THE FIRE ONLY HALF AS MUCH"

This Fire Pot interchanges with the Solid Pot.

Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.



What Delays Mean

They say "The Early Bird catches the Grasshopper," or words to that effect.

And it's as true in the heating business as in anything else.

We heard the other day of a Dealer down in Massachusetts who had been thinking, since early in the Spring, of taking the Agency for the KELSEY Generator in his vicinity.

He was waiting for some big job to come along,—to make it worth while to make the change.

But before the big job came along, a hustling young heating man started out in business for himself, applied for the KELSEY Agency and got it.

That wasn't so very long ago,—only a few weeks,—but it begins to look as tho the new Dealer had found his life's opportunity, by the way he is rounding up sales.

And at good prices, too!

The moral is,—don't let somebody else get the KELSEY Agency while you're thinking about it.

No better time to start than now,—just at the beginning of the Busy Fall Season.

Shall we send our Exclusive Agency Proposition?

KELSEY HEATING CO., SYRACUSE, N. Y.

New York City: 156 Fifth Avenue.

VAN EVERA & LEWIS MFG. CO. 104-106 W. Lake St., Chicago.

JAMES SMART MFG. CO., Brockville, Ont., Sole Makers for Canada.

"Quick Meal" Steel Ranges

The Original "Triple Wall" Steel Range. Original in design and general construction. Made to be distinctly different from other Ranges. Built to secure the best results from the fuel used and best wear from the material in the Range. The strength is placed where needed and not in places to attract attention. A careful comparison will show why the "Quick Meal" Range has proven such a profit-maker for the dealer.

RINGEN STOVE CO. DIV. OF AMERICAN STOVE CO.

ST. LOUIS, MO.

SAN FRANCISCO, CAL. **Indiana St. Between 20th and 21st.**

THE "RELIABLE" RANGE

Sells Quickest—Because

in its construction are combined in perfect harmony **not a few—but all** features of practical value that are considered desirable by dealers in, and by users of coal and wood ranges.

Made and fully guaranteed by

Catalogue No. 34A and prices to the trade will interest you.
WRITE FOR THEM NOW

The Schneider & Trenkamp Co.

Div. of American Stove Co.

Cleveland, Ohio

Sell The Cosby Patent Baker & Heater This Season

The fastest selling stoves on the market, because they fill the needs of the people. Cosby Baker and Heaters do **double** work — they **cook** anything—**heat** any room. Bottom and top of cast iron. If you want to sell more stoves—to make more **money**—write us **at once** for full information. Merchants everywhere are adding the line. We are doing much general advertising.

Union Stove Co., (Inc.)
501-2 Mutual Building Richmond, Va.

It Means Profit—Dollars and Cents—For You
not alone that but

YOUR RANGE BUSINESS WILL BOOM
if you will sell

THE WILLARD STEEL RANGE

It is not a cheap range but a good, honest quality range at a **L-O-W P-R-I-C-E.** A better range than you can get anywhere for the money. Durable—will last a lifetime. Economical—a fuel saver.

THE WILLARD STEEL RANGE is up-to-date in every respect, combining every possible improvement. It is bound to satisfy the purchaser, bound to sell, and the dealer that sells the **"Willard"** is bound to make a **G-O-O-D P-R-O-F-I-T.** Write and I will make you the greatest (most profitable) proposition ever offered.

YOUR OWN NAME PLATE ON RANGES ON ORDERS OF TEN OR MORE

WM. G. WILLARD, Room No. 28 Willard Bldg., (316 CHESTNUT STREET) **St. Louis, Mo.**

More Points of General Merit
are found in the

PEORIA LEXINGTON STEEL RANGES

than in any other

They have all the latest improvements of practical value to Steel Ranges. They are the best, most substantial, most perfect operating ranges made. There are

Many Good Features

embodied in the Peoria Lexington Steel Range. Thermometer in Oven, Large Fire Box, Duplex Grate, Deep Ash Pit, Large Bailed Ash Pan, Ash Chute, Large Pouch Feed Door with Register and Zero Drop Handle, Cast Iron Back Flue or Smoke Box, Oven Bottom very heavy, securely braced, NEVER BREAK OVEN DOOR (recently patented), High Closet Roll Top Door, Enameled Reservoir, Nickel Ornamentation very elaborate, elegant and attractive, Aluminized Oven.

Write for Printed Matter.

Culter & Proctor Stove Co.
Hamilton and Water Street PEORIA, ILLINOIS
Our Motto is and Always has been Not How Cheap—But How Good.

Any Dealer Can Make Money
By Selling

THE O-HI-O STEAM COOKER AND BAKER

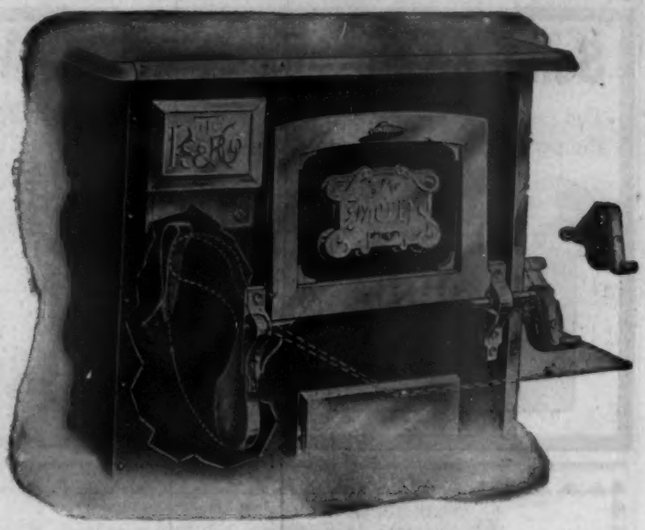
It is being made known to more than **Ten Million Women** through our extensive advertising campaign. These women are constantly reading about the "O-HI-O" in all the leading publications. Through this extensive advertising, we are receiving **thousands of inquiries** from every town in the country, and these inquires are immediately referred back to our local dealer, (if we have one). A number of dealers have already taken hold of this extraordinary offer and say that the **O-HI-O STEAM COOKER** is the best; is a good A-1 seller and pays the largest profit.

Fine Electrical Display Stand, Display Cards and Literature furnished all dealers.

Remember—to sell the O-HI-O Steam Cooker and Baker means "To Make Money". You are surely in business for the profit you make. *Well, then, write*

THE O-HI-O COOKER CO., 531 Jefferson Ave., Toledo, Ohio

Our "Non Buckable" Oven Bottom in **Range** with front section removed showing ribbed **Flue Bottom** covered with asbestos cement.



The above cut shows the Famous "Patented Balanced Oven Door" used only on **Model Steel Ranges.**

PATENTED "NON-BUCKABLE" OVEN BOTTOM

This cut shows our Patented "Non-Buckable" Oven Bottom with sections separated. It "Makes Good" the weakest point of Steel Range Construction. "No more lop-sided pies with the 'stuffin' all on one side."

The Patented **"Non-Buckable"** Oven Bottom is the greatest improvement made in the constrtction of Steel Ranges for many years.

You can learn all about them and many other **Patented Specialties** in Catalogue No. 18 just issued by

The Portsmouth Stove & Range Company,

PORTSMOUTH, OHIO.

If you haven't received one, send for it. The Model Steel Range is bristling with exclusive **"Patented Good Things."**

Summit Stove Company, La Crosse, Wis.

Mr. Dealer—

The more specialty points on a steel range, the easier and quicker the sale is made.

Are you looking for specialties?

A few specialties on

Summit Steel Ranges

Elevated Key Plate,

Automatic Damper connected with slide on pipe.

Oven Thermometer Guide on closet door, showing time and heat required.

Anti Scorch cover.

WRITE US

FOR PRICES AND DISCOUNTS.

The MASTER ECONOMY is a SPECIALTY

It is more different from the common run of stoves than any other practical heater on the market. It has a

Tremendous Sale

NEW IDEAS have been incorporated in the construction of this stove. It is a giant among others—

Chief of Them All

The Master Economy is a Specialty—the best specialty now before the trade. It is a base heater for hard coal, soft coal, or wood. A stove that is economical.

It is THE master of economy. Built well, durable. It is a heater that will sell

Because

It saves one-half the fuel.
It is noted for simplicity.
It is highly ornamented.
It is a heater that gives absolute satisfaction.
It pays a Good Profit.

MANUFACTURED BY

Comstock-Castle Stove Co.
Quincy, Ill.

Foster's Prize

STEEL RANGE is IT

You will fully appreciate its many excellent qualities. All late improvements of practical value are found in Foster's Prize Steel Range. Order a sample—you will not be disappointed if you secure the agency. Foster's Prize Steel Range is a "dealer's money maker" right from the start.

Send for catalog.

Foster Stove Company
IRONTON, OHIO

Champion Mission Cooker

Three-Burner Style

Is Something Entirely New in Gas Cooking Stoves
Something Everybody Will Want

THE Champion Mission Cooker, made of heavy steel and angle iron, nicely black japanned and strongly braced, having loose grate over each burner, is an **ideal, economical summer cooker,** for by the addition of an oven anyone can have a **first-class** permanent **gas cooking** and **baking apparatus** at about **one-third** the **cost** of a gas range. Made in two and three burner styles.

Don't be Too Late to Get the Agency
Order Now and Make Sure

THE CHAMPION STEEL RANGE CO.
CLEVELAND, OHIO

There Is Only ONE Ventiduct Base Burner

—The— Gold Coin

All Others Are Imitations.

This beautiful and original design surpasses anything yet produced in the stove makers' art, and excels in powerful radiation and economy of fuel.

The bold Nickel Trimmings have a mirror finish and are ventilated so as to not tarnish.

Every stove is a double heater. No difficulty in heating a room above without detracting from the direct radiation.

Large Hot-Air Flues, Powerful Base Radiation, Solid Round Fire Pot, Duplex Grate and Shaking Ring.

Send for illustrated catalog.

Chicago Stove Wks.
Blue Island Ave. and 22nd Street
Chicago, Illinois.

The "Manest" Family Clothes Dryer

A LAUNDRY STOVE AND DRYING CABINET COMBINED.

One Fire { **Boils the Clothes** / **Dries " "** / **Heats the Irons** }

FOR RESIDENCES, APARTMENT HOUSES, INSTITUTIONS, HOTELS, ETC.

MANUFACTURED BY

THE MANNEN & ESTERLY CO.
CLEVELAND, OHIO

Heavy Steel Furnace

With Cast Iron Head

Made of the best quality of

Very Heavy Boiler Plates

with front and back radiator.

Great Economy of Fuel.

Extraordinary Power and Quick Heating Capacity.

Absolutely Gas, Smoke and Dust Tight.

Write for printed matter and prices.

Walter S. Rait & Co.
211-213 Lake St., Chicago, Ill.

CUT THIS OUT

To the Publishers **The American Artisan and Hardware Record**
69 Dearborn Street, CHICAGO

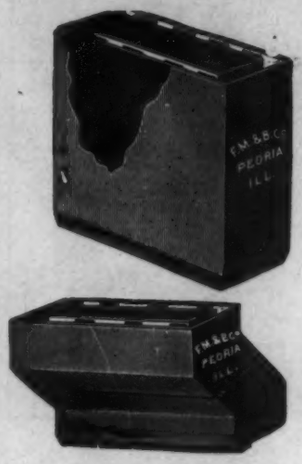
Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

Name.....

Address.....

Town.....State.....

Improved Handy Furnace Pipe



insure a larger flow of heated air and better results. The usual loss of time and patience is entirely obviated by the use of this pipe. The one end is ⅝ inch larger than the other. It can be practically **thrown together.** Our slip is now 1⅝ inches long, making it **the longest** used on any double wall pipe.

Do You Want Us to PROVE TO YOU

that

IMPROVED Handy Furnace Pipe

is absolutely the very best manufactured? We'll do it.

SEND FOR SAMPLES

All our other lines, such as Round Pipe Elbows, Registers, Asbestos, etc., are complete. All orders, large or small, receive immediate attention.

OUR SHIPPING FACILITIES ARE UNSURPASSED

Our catalog is ABSOLUTELY FREE—send for it.

F. MEYER & BRO. CO.

PEORIA - - ILLINOIS

STEEL CASING RINGS

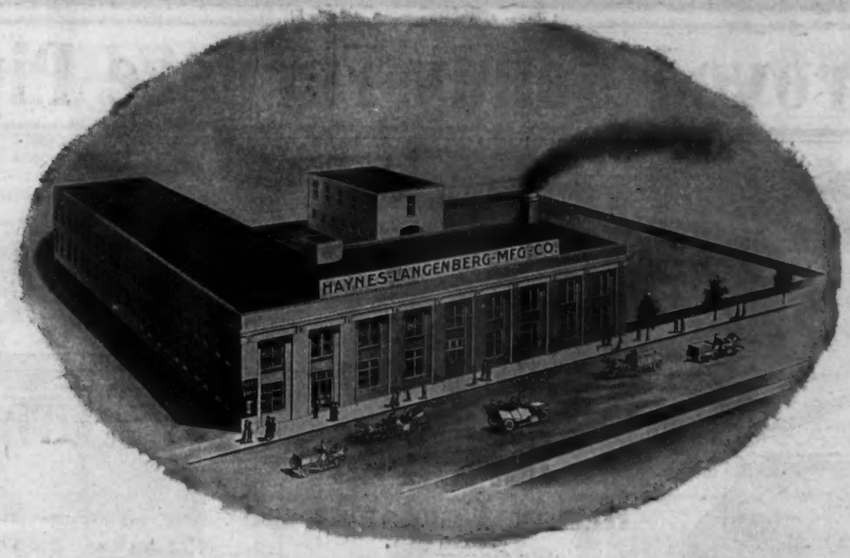
Are Made to Conform to Individual Requirements in Every Respect

NEVER BREAK **CIRCLES PERFECT**

READY TO USE **INCREASE PROFITS**

THE WALWORTH RUN FOUNDRY CO., 27th St., S. W., **Cleveland, O.**

Makers of Fine Grey Iron Castings :: :: **Mfrs. of Semi-Steel Registers**



NEW HOME OF THE

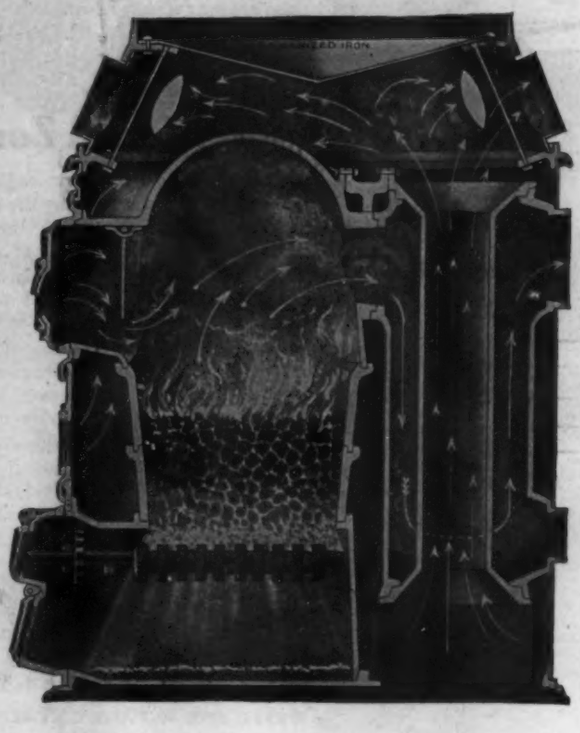
Front Rank Steel Furnace

We are now located at **4045-4047 Forest Park Boulevard,** in the heart of St. Louis. Our factory is equipped with the latest and best machinery and our facilities are unexcelled for good work and prompt shipment.

In the FRONT RANK STEEL FURNACE we have endeavored to embody everything essential for a first-class heater. The material used is of the best heavy armor plate steel and the riveting is done with heavy machinery using great pressure and making the same perfectly tight so that gas or dust cannot escape into the rooms. The firepot is lined with genuine fire brick tiling. The grates are heavy, triangular, and work independently. The base and bottom casing ring are a single casting and make a solid support for the furnace in any kind of cellar.

We want live agents in every town. Write for catalogue and terms.

Haynes-Langenberg Mfg. Co.
4045-4047 Forest Park Boul.
ST. LOUIS, MO.



Shaded Sectional Cut

of the

"Low Down" Crown Warm Air Furnace

Designed to show the direction taken by the gases and warm air. Also the thickness and staunchness of its parts.

March-Brownback Stove Co.

POTTSTOWN, PA.

Monarch Air Blast

All the advantages of our famous MONARCH plus the air blast. This is a sectional upper fire pot constructed so that oxygen is fed into and above the fuel burning the gases, assuring economy, cleanliness. It is the most practical soft coal furnace offered the trade.

Forest City Foundry & Mfg. Co.

CLEVELAND, OHIO

Mfrs. The Imperial, Niagara and Combination Furnaces, Registers, Mail Boxes, Hitching and Sash Weights, Etc. Write for our new Catalog.

Large Radiating Surface Important

It is the radiating surface which determines the amount of heat a furnace is going to get out of the fuel used. The size of the fire pot determines the amount of fuel a furnace will burn.

Lennox Torrid Zone

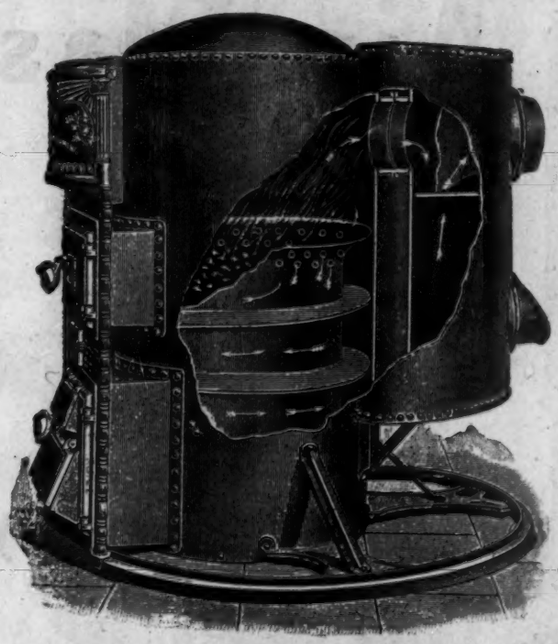
steel furnaces have very large radiating surface nearly doubled in area by the extra indirect radiator through which the hot smoke is made to pass for eight feet of smoke travel. A hanging partition in this radiator causes the smoke to descend within eight inches of the bottom of the radiator before passing up the other side. This is longer smoke travel than any other furnace has and is possible only by reason of the convenient direct and indirect draft change. In Torrid Zone furnaces the indirect draft does not have to be strong enough at all times to permit of opening the fuel door for the direct draft can be had at one pull of a damper rod. Thus when fuel door is closed and damper is turned for indirect draft more of the hot gases can be held back from escaping up the chimney and used as fuel. This makes Torrid Zone furnaces fuel savers. It is only one of the many great selling points of this furnace.

WRITE FOR 40-PAGE CATALOG

Lennox Furnace Co.

Marshalltown, Iowa

The WEIR All Steel Gas and Soot Consuming Furnace



is the only **absolutely gas-tight** and **gas** and **soot consuming** furnace in the market.

It is **the** Pioneer Steel Furnace.

Has been sold for twenty-five years. Is made of heavy boiler plate, riveted and calked like a steam boiler. Easy to install and easy to manage. *A remarkable fuel saver.*

Write for our new catalog.

MADE BY

THE MEYER FURNACE CO.,

PEORIA, ILL.

BOYNTON'S

Warm Air Furnaces

Hot Water Heaters & Steam Boilers

Have stood for an honest value for nearly sixty (60) years—more than half a century. Their reputation has a firm foundation. They were the best then, they ***are the best now. Always first*** with every ***real improvement.***

Boynton Furnaces are made of cast iron or steel plate, or combination of both—portable or brick set—for hard or soft coal, wood, lignite, or any fuel, and are adapted for any climate.

The New Patent Square Firepot found in all Boynton Latest Pattern Furnaces.

Boynton Furnaces have built a ***reputation*** for many dealers and they ***will do*** the same ***for you.***

Catalogue and Prices Cheerfully Sent on Request.

BOYNTON'S STEEL DOME FURNACE

Do You Want

To build a reputation for yourself
To Increase your business
To Satisfy your customers

Sell the Boynton

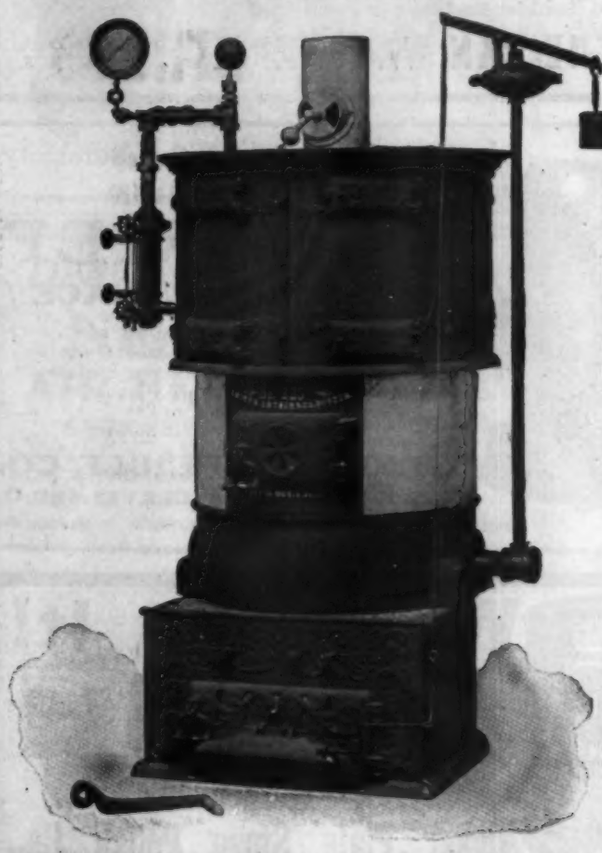
THE BOYNTON FURNACE CO.

147-149 Lake Street
CHICAGO

J. H. MANNY C. E. MANNY
Chicago Managers.

NEW YORK OFFICE, 207-209 Water St.

PACIFIC COAST AGENTS:
J. C. Bayer Furnace Co., Portland, Ore.
Wm. Brown, Spokane, Wash.
Finlay & Robb, Seattle, Wash.
Holbrook, Merrill & Stetson, San Francisco, Cal.



No Loose Joints!

In the

Hub Steam Heater

Bolted or packed joints complicate the setting, and there is no certainty that they are tight until the job is finished and tested. Even then the durability of the joint is doubtful. **There is but one joint** in the **Hub** Steam Heater **and that a screw joint.**

Notice the protection of the Steam Dome against outside air currents in the Cellar. It is entirely surrounded by a hot air flue, insuring hotter and dryer steam and thoroughly utilizing the heat units.

Our new catalogue of Steam and Hot Water Heaters, with list of Fittings, Tables and useful information for Steam Fitters gladly sent on application.

SMITH & ANTHONY CO.

52 & 54 Union St., BOSTON

MAKERS HUB RANGES AND HEATERS

A Furnace With Special Features

Which will appeal to your customers with a big margin of profit is what you are looking for. Why sell a Furnace almost like your competitor's? A man to make money must get a specialty and push it. It costs no more than any good furnace and sells a great deal easier.

GREEN'S COLONIAL FURNACE

Hot Air Blast Fire Pot which allows the heated air to pass into and over the fire, converts the gas and smoke into heat ***reducing coal bills.***

Double Feed Doors which admit large chunks of coal.

Long Distance Heating by means of the oval opening through the center of radiator. The rooms fartherest from the furnace can be as easily heated as rooms with short runs. Heavy radiator with ***long smoke travel,*** provided with ***direct draft*** and cleanout.

Grate bars ***each operating independent*** of the others, three outer supports instead of one inner support; ***deep ash pit, large combustion chamber; water coil pocket; one-piece base ring; large hot air chamber. Heavy, Durable, Economical.***

WRITE FOR DISCOUNTS! ORDER A SAMPLE

Green Foundry and Furnace Works, (Dept. A) Des Moines, Iowa

WE MAKE

Plain Radiators

Don't Forget this

Send for Catalogue

Kellogg-Mackay-Cameron Co.

K.-M.-C. Building
Michigan Ave. and 12th St.
CHICAGO

MINNEAPOLIS
101-106 2nd St. South

KANSAS CITY
2nd and Main Streets

SEATTLE
639 New York Block

Hot Water Heater

Gas or Gasoline

For bathtubs, hotels, restaurants, undertakers, barbers and family use. Has a

Perfect Circulation Through Copper Coil

at bottom, all water drawn through the coil. Hot water in small qualities in **one minute, fifteen gallons** in twenty minutes.
Send for illustrated catalogue.

THE VAN WAGONER CO., 827 12th Street, DETROIT, MICH.

Economy, Cleanliness and Durability all combined in the

MONCRIEF

WARM AIR FURNACE

A few of the many good points of the MONCRIEF
- All Cast Iron
- Moncrief Duplex Grate
- Large Radiating Surface
- Top Return Flue
- Double Fire Pot
- Large Grate Surface

HENRY & SCHEIBLE CO.
825-29 Long Ave., N.W. CLEVELAND, O.
Western Sales Agent—J. C. KIMMEL, 3314 E. 15th St., Kansas City, Mo.

We Make It!

The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber

Nickel Plate Stove Polish Co.
CHICAGO.

Large 10 oz. Can.

Height 62 inches.

The Stanton Seamless
Slack Burning Furnace

Made of Locomotive Fire Box Steel

The most perfect smoke and soot consuming furnace on the market. Guaranteed absolutely smoke and gas tight. Recommended for **Soft Coal Slack,** the use of which will reduce the fuel bill of your customer more than one-half. One sold and properly installed will sell another.

Write for catalogue and discount.

The Stanton Heater Co.
MARTINS FERRY, OHIO

It's In The Construction

A furnace may be made of the best of materials, and still not be a successful heater. It depends upon the construction of, and proportioning of the different parts.

The "MUELLER" All Cast, Double Radiator Furnace is constructed on practical and scientific principles. The proportioning of the different parts distributes the vast amount of direct heating surface so as to absorb all the heat.

"MORE DIRECT HEATING SURFACE than any other heater," is the guarantee given with this heater.

We will send you a copy of our catalog if you wish it.

L. J. Mueller Furnace Company
ESTABLISHED 1857
191 Reed Street **MILWAUKEE, WIS.**

Dealers Who Are Selling The

NEW AKRON
AIR BLAST FURNACE
CONTROL THE TRADE

The NEW AKRON AIR BLAST embodies all the GOOD FEATURES of the old original and many new ones. You can not afford to handle any other furnace when you can get the AKRON AIR BLAST. Read the testimonials from parties who have used the furnaces from 15 to 17 years.

1800 **A WELL PLEASED CUSTOMER.**

MAY & FIEBEGER, Akron, O., April 4, 1907.

Dear Sirs—After having tested one of your Akron "Air Blast" Furnaces for the past seventeen years, I am pleased to inform you that it has always given entire satisfaction and comfort. My furnace was one of the first Akron Air Blasts on the market.

The expense on the furnace has been comparatively small. With the exception of possibly two or three smoke stacks and a few other incidentals, I have had no expense since it was first installed in the Fall of 1890. The Fire Pot and Grate are apparently as good as new and are good for several years to come.

I can fully recommend the Akron Air Blast Furnace as being a Self-Cleaning Furnace and a most powerful heater, not being cleaned in seventeen years.

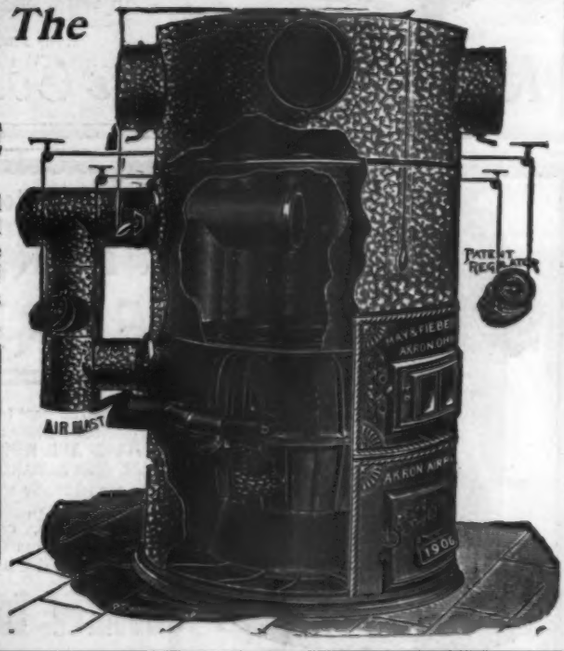
As to consumption of fuel and ease of management of furnace, has proved itself all that could be desired.

The Akron Air Blast Furnace well deserves the success it has attained.

Very sincerely, GEO. F. FRICKER.

Send for Catalogue and Prices to the Manufacturers

MAY & FIEBEGER, Akron, Ohio.



GILT EDGE BADGER FOR HARD COAL

COMBINES ALL THE FEATURES
necessary to make it a most convenient perfect working and economical furnace.

CAST FIRE SECTION
with steel dome and return flue radiator.

PERFECTLY BUILT
and perfectly mounted and having the best of all modern conveniences. Made in 20, 23, 26 and 29-inch fire-pots.

CATALOGUE ON APPLICATION

R. J. SCHWAB & SONS' CO.,
MILWAUKEE, WIS.

Robinson Tubular Furnaces

Give Entire Satisfaction. Absolutely the Best Furnaces on the Market.

HOT BLAST FURNACE.

BECAUSE—
They are the only Tubular Furnaces having **direct draft and return flue with long fire travel,** which means—***LESS FUEL***—

LARGE RADIATING SURFACE—
The fire travels farther in the *Robinson Tubular Furnace* than in any other and this adds to the heating capacity—***MORE HEAT***—

The Robinson Hot Blast Furnace
"Corrugated Dome and Cast Radiator"
is a first-class furnace, up-to-date in every respect, simple in construction, but very effective in keeping a clean, bright fire. Positively gas-tight throughout.

SEND FOR CATALOG.

TUBULAR FURNACE.

Robinson Furnace Co., 107-109 Lake Street, CHICAGO, ILLINOIS

The Record of the

FLORAL CITY FURNACES

During the past ten years has never been equalled. They are, as a line, the **BEST FITTED AND MOST POWERFUL, ECONOMICAL AND DURABLE FURNACES MADE,** and we stand ready to prove this at any time by actual test. Perfect castings, skillful workmanship, careful supervision, these are the features that mark the superiority of the Floral City.

Monroe Foundry & Furnace Co., Monroe, Mich.

MICA

ASSORTED PACKAGES Put Up Expressly For the Retail Trade.

ONE POUND—4 SIZES

¼-LB. EACH SIZE

North Carolina, $3.05 { 4 x6 2¾x3¼
Wyoming . . . . 2.62 { 2½x3 2 x5

TWO POUND—8 SIZES

¼-LB. EACH SIZE

North Carolina, $5.95 { 2x3 2¾x3½
2x4 2¼x3
Wyoming . . . . 5.10 { 3x3 2¼x5
3x4 4 x6

THREE POUND—12 SIZES

¼-LB. EACH SIZE

North Carolina, $8.55 { 4 x5 2¾x3¾
2½x4½ 2 x4
3 x3 2¾x2¾

Wyoming . . . $7.35 { 2½x3 5 x6
2 x3 2¼x5
2 x4½ 2¼x3¼

STANDARD PRICE LIST OF ALL SIZES WITH DISCOUNTS ON APPLICATION.

EUGENE MUNSELL & CO.

NEW YORK 358 Dearborn St., CHICAGO

Lion Furnace

Can use Hard or Soft Coal

Giving the
GREATEST HEAT
with the
LEAST FUEL
Pot interchangeable with our
APEX FURNACE
Durable, simple in construction and a
FINE SELLER
Write today for catalogue.

Rood & McIntyre, Kansas City, Mo.
Southwestern Distributors

YOUNGSTOWN FURNACE & SUPPLY CO.

YOUNGSTOWN, OHIO
Chicago Office, 211-213 Lake Street

One of the Sure Sellers

THE MAJESTIC

Coal or Wood

CHUTE

Heavy Wrought Steel Fame, Body and Hopper.

Neat cast door which automatically locks itself open or shut. Door closes flush with the wall. Made in three sizes.

Secure the Agency NOW.

The Chappell Furnace Co.

MORENCI, MICHIGAN
1005 Monadnock Bldg., CHICAGO, ILL.

The Novelty Warm Air Furnace System

To the live Furnace Agent of Progresstown:

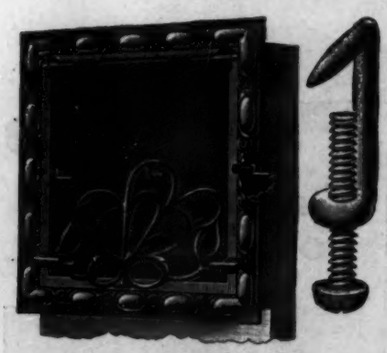
Would it please you

To secure the contracts for heating a majority of the good residences going up in your neighborhood?
To make double the normal profit on each of these contracts?
To give these customers better value for their money and better satisfaction than they received before?
To have the results of these heating jobs absolutely guaranteed to you?

Well—the Novelty Furnace Handbook will show you HOW.

ABRAM COX STOVE COMPANY

Fairhill Station, PHILADELPHIA
15-19 West Lake St., CHICAGO



Hold Fast Hook and Bolt Device
Patent Pending

Symonds Wall Register

Showing New Holdfast Hook and Bolt Device.

One of the styles we make to install above baseboard — installation not necessary until building is finished.

New Hook and Bolt device eliminates tin strap, rivets, cleats, wood, screws, wire and nails. No breaking of plaster. Conforms with strictest fire laws. Saves time and money. Do you catch on, the hook does.

SYMONDS MFG. CO., EAST ST. LOUIS ILLINOIS

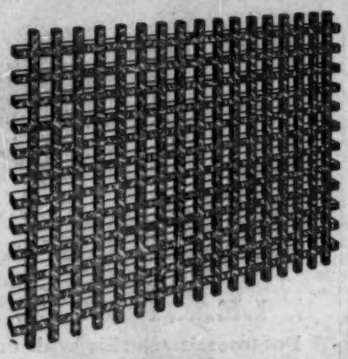
Barler's Ideal Oil Heaters

Give plenty of heat without odor or smoke. Are easy to use. Do not require repairs, and are just the kind that pay a dealer to push sales. We should like to ship you one for examination to know what you think of a heater that so many dealers say is by all odds the best.

A. C. Barler Mfg. Co.
104-106 Lake Street, Chicago

IF YOU WISH TO INCREASE YOUR SALES on Hot Air Furnaces—use

Hard Wood Cold Air Faces

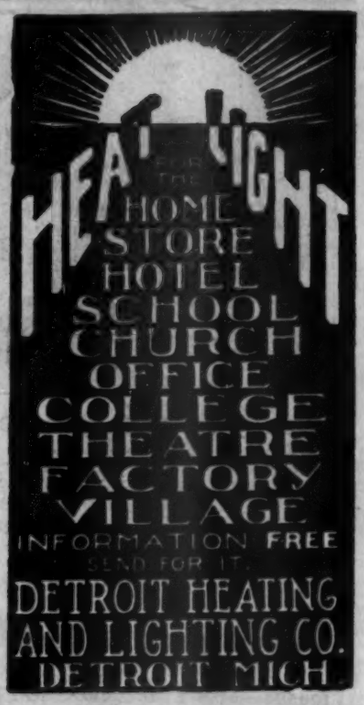


- They appeal to a woman's pride in her home.
- They add beauty and elegance to the appearance of the hall.
- We make them for the floor—Hall Seats and Side Wall—in every shape.

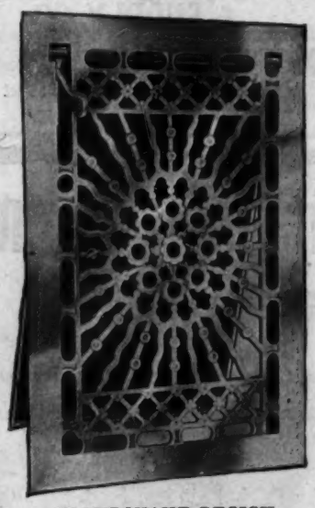
65 Cents the Square Foot

A Sample and Price List for the Asking.

THE WOODEN VENTILATOR CO., East Palestine, Ohio



WAFER SIDE WALL REGISTERS



FLAMBOYANT DESIGN

To Set VERTICALLY or HORIZONTALLY

are

As Thin as a Wafer

Made with a single steel valve.
1 inch deep only when closed.
For shallow flues and thin partitions.

T. & B. REGISTERS

have stood the test for 60 years —will last a lifetime.

A large stock always on hand for immediate shipment.

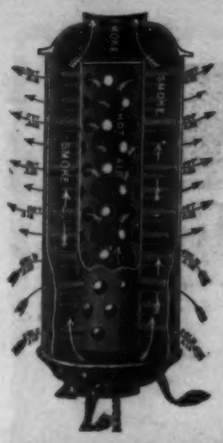
Write for Catalog

TUTTLE & BAILEY MFG. COMPANY

NEW YORK CHICAGO BOSTON

W. W. Anderson, Sadorus, Ill., writes: "The tools I advertised are now sold, but I am still receiving inquiries about them. An ad. in THE AMERICAN ARTISAN does the business every time."

6-7



SAVE ONE-HALF YOUR FUEL

by using the

Rochester Radiator

Satisfaction guaranteed or money refunded. Over 100,000 of them in use. Fits any stove or furnace. Price from $2.00 to $12.00 We make the original and genuine "ROCHESTER RADIATOR."

WE DO NOT SELL TO CATALOGUE HOUSES.

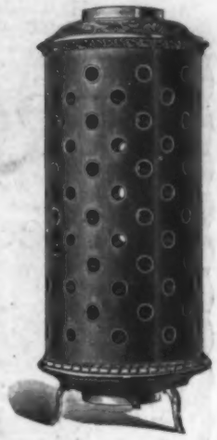
For Hard or Soft Coal, Wood or Gas. We refer all inquiries to you from your town when you carry a stock of our Radiators. We guarantee our Radiators not to choke or interfere with the draught, they are easily cleaned.

Write for Descriptive Catalogue and prices.

ROCHESTER RADIATOR CO.

120 FURNACE STREET, ROCHESTER, N. Y.

Boston, Mass., S. M. Howes Co.
St. Paul, Minn., Farwell, Ozmun, Kirk & Co.
Sioux City, Ia., Knapp & Spencer Co.
Kansas City, Mo., The Hartison & Modica Mfg. Co.
Kingston, N. Y., Canfield Supply Co.
Detroit, Mich., Standart Bros., Ltd.
Omaha, Neb., Wright & Wilhelmy Co.
Chicago, Ill., Orr & Lockett Hdw. Co.
Portland, Ore., F. W. Isherwood Esq.
Hamilton, Ont., The D. Moore Co., Ltd



REGISTERS

Semi-Steel Floor—Cast Iron Floor
Wrought Steel Special Side Wall
Cast Iron Special Side Wall

We make them all—in all Finishes
Get our prices before buying

ESTABLISHED 1857

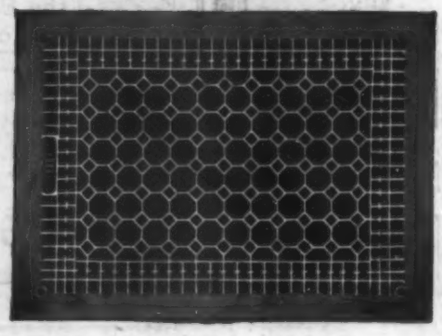
L. J. MUELLER FURNACE CO., 191 REED STREET, Milwaukee, Wis.

Ferrosteel Registers

The only house in the world manufacturing

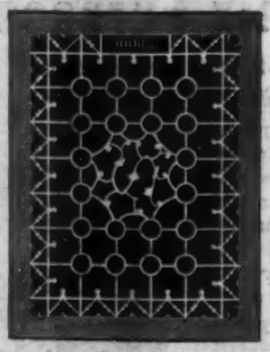
CAST IRON FLOOR
SEMI STEEL FLOOR
WROUGHT STEEL FLOOR
CAST IRON SPECIAL SIDE WALL
WROUGHT STEEL SPECIAL SIDE WALL
FLAT OR CONVEX EXTRA SHALLOW SIDE WALLS
DEFLECTORS, PANCAKES, WAFERS

In all Designs and Finishes.
Mechanism Perfect.
Capacity Greatest.
Finish Unsurpassed.
No reputable line can undersell us.



Moorish Design

Ferrosteel Company, Cleveland, Ohio



REGISTERS

WE DO NOT BELONG TO THE ASSOCIATION
MAKERS OF WARM AIR REGISTERS

Neat in design and of superior finish. Are interchangeable with all first class makes. We have the largest foundry of any Register manufacturers in the United States.

Our molding room 75x950 feet. We carry large stock insuring prompt shipment.

Get our prices. We can save you 25%.

STANDARD REGISTER CO., Cleveland, Ohio

Register Department of The Standard Foundry & Mfg. Co.

THE
HERO FURNACE
is made in
Three Complete Styles
and
Sixteen Sizes
Each made to burn any kind of fuel. Can't we satisfy
YOUR TRADE
with such a complete line?

Chas. Smith Company
101 Lake Street, Chicago, Ill.

You can heat that cold room with one of Smith's Auxiliary Water Heaters. They fit in any furnace.

BOOMER FURNACES

Quickly Establish a Local Reputation

It is always a little hard to introduce an old Furnace in New Territory.

But the first BOOMER Furnace you sell will pave the way for an unlimited profitable furnace business.

It is likewise better to take an old, time-tried furnace like the BOOMER, and sell it in new territory, than to continue selling, or endeavoring to sell, a Furnace that does not "stand up" the way you would like to have it.

The BOOMER Furnace is one of those always-reliable, sure-to-give-satisfaction commodities that is a genuine pleasure to sell.

The BOOMER Agency, remember, has attractive inducements.

We'll gladly send you our Furnace catalogue upon request.

The HESS-SNYDER COMPANY
Manufacturers MASSILLON, OHIO

Mr. Dealer! Do You Know
about the many patented improvements found in
The "Norman" Phœnix Furnace
which make it far superior to any type of warm air generator in existence? Do you know it is the best type of warm air generator on the market?

YOU OUGHT TO

Send for our booklet on "Sanitary Heated Air." It describes the "Norman" Phœnix Furnace and gives many pointers which should prove of financial value to any furnace man. **Just ask for it.** We'll mail you a copy absolutely free.

GALUSHA STOVE CO. :: Rochester, N. Y.

BIG FURNACES
FOR BIG BUILDINGS

¶ We build not only furnaces to heat a small building, but furnaces of immense capacity and power for large churches, business buildings and schools.

¶ 12 churches in one town (Topeka, Kas.) heated by the Canton Perfect Blast Furnaces

¶ You can control the large heater contracts with them.

THE BONNOT CO.
CANTON, OHIO
HIGH GRADE HEATERS

A Perfect Wood Burning Furnace

Which obtains the maximum of heat from the minimum of wood.
Made in either brick-set or portable form.
In three sizes.
Capacity ranging from 10,000 to 50,000 cubic feet.
Very large feed door.
Burns four foot wood.
One-Piece Steel Bar Casing Rings.
Long fire travel.
A durable and powerful heater.

WRITE FOR PRICES

KEITH FURNACE CO., Manfrs., Des Moines, Iowa.

To The American Artisan,
Chicago, Ill.

Your Paper is the best of its kind in the market. I received thirty-six letters during the past three weeks from parties looking for tinners and plumbers. Many thanks for the ad.

P. C. Westphal,
Paynette, Wisc.

Round Oak Furnaces

are the

STANDARD of AMERICA

They are constructed with the greatest possible care of the very best material obtainable by skilled workmen

NO BETTER LINE OF GOODS EXIST
for any dealer to make a reputation with.

The ROUND OAK

is a furnace that will prove absolutely satisfactory to the user, and the dealer that is wise enough to sell it

WILL MAKE MONEY

ITS ADVANTAGES:

The Ash Pit or Furnace Bottom is one solid, single-piece casting and has the *door frame cast on, doing away entirely with any leakage of gas or smoke* between the door frame or furnace.

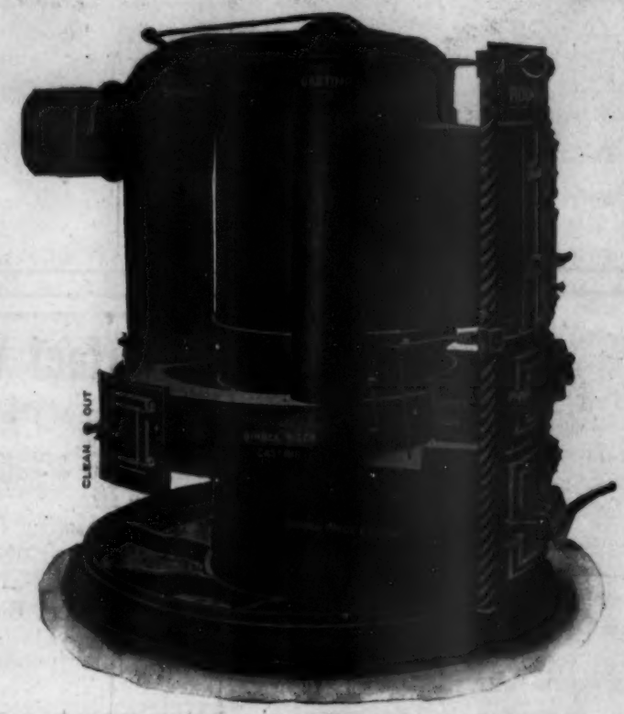
The Bottom Ring on which both furnace and casing rest, is cast in *one piece.*

The Triangular Revolving Grate used in the Round Oak can be *shaken* from the *outside,* without opening the Ash Pit Door.

The Feed Doors are extra large.

The Dome is made in one single piece casting.

The Return Flue feature of the Round Oak Furnace has proven to be a *good one.* All *Round Oak Furnaces* are equipped with our special *Hot Blast* attachment.



Side view Round Oak Furnace without galvanized iron casing.

The Round Oak Furnace will burn any kind of fuel, hard or soft coal, coke or wood.

OUR CATALOGUE

which fully describes the many good features of the Round Oak Heating Stove, Round Oak Chief Steel Range and the Round Oak Furnace will be

SENT ON REQUEST

Estate of P. D. BECKWITH, Inc. - DOWAGIAC, MICH.

FRED E. LEE, Pres. and Gen. Mgr.

MAKERS OF GOOD GOODS ONLY

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS. (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00.
Address all Letters, Communications, and Remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, AUGUST 24, 1907.

THE waster plate must cease to masquerade as good honest roofing tin.

NOW comes Leslie M. Shaw, former secretary of the United States Treasury, with the comforting assurance that the United States is all right—and hard times far distant, unless we want them.

NOTHING new under the sun, eh? How about the fact that the newspaper advertisements of the merchants of St. Joseph, Missouri, who are members of the Retail Merchants' Association of that city are guaranteed by the association? In a prominent place in each advertisement appears the proud notice, "This advertisement is guaranteed by the Retail Merchants' Association of St. Joseph," and the effect upon the reader is said to resemble that of the hall mark on the purchaser of sterling silver. It inspires confidence and makes selling a cinch.

The Business Situation.

AS TO the soundness of the present business situation and the nature of the business outlook, the public pulse has just been felt in rather a remarkable manner by the Commercial National Bank of Chicago. This institution recently sent to something like 30,000 correspondents throughout the United States, requesting their answers to several important queries, including the general question, "Is the business situation sound and the outlook assuring?" The answers were summarized in a report issued by the bank August 20th, and the general reply was overwhelmingly in the affirmative. Every word of the report is interesting and enlightening at the present time and it cannot be too widely circulated. It says:

"The overwhelming preponderance of evidence is that the business situation is sound and satisfactory. Not one of the thousands of replies negatives this conclusion in definite terms. That there has been a marked easing down from the tension of the spring and winter months of the year is generally admitted, but it is admitted without a trace of regret or misgiving.

"The country has been rushing ahead at a whirlwind pace until the tax on credit and capital accumulations compelled a respite. The demand for goods to meet instant needs, or to replace other goods destroyed by wars and calamities, or to provide for the certain needs of the future, has been unprecedented. To meet this it has been necessary for the manufacturers and distributive agencies of the entire world to employ almost every available unit of money and to put into action every potentiality of credit. The strain on the money centers of the world has been great.

"The bankers of the country, with few exceptions in the far west, report an extraordinary demand for funds in all lines of business activity. Interest rates are firm everywhere and in the central reserve and larger reserve cities the inquiry for funds so much exceeds the supply that money is described as 'tight.' The range of our investigation justifies the conclusion that bank deposits show a straight average increase of 14.2 per cent against a similar average increase of 10.8 per cent in the loans. The averages weighed according to the relative magnitudes of the totals would probably show a closer correspondence between the growth of deposits and of loans.

"The consensus of opinion is that the demands of legitimate business will continue to absorb all available funds for some time to come and there is nothing in our review to suggest any recession in rates, at least not before the year-end liquidation.

"Our reports are unanimous in saying that the prosperity in every line of business during the last year has been superlative. The vital question which every one is asking has to do with the future. Is the wave of prosperity still rising or have we reached the crest and begun the descent to more moderate conditions? The reports we have received indicate that the credit situation on which all else finally depends is sound. It appears that there is a tendency in many lines to take a slower pace than we have been accustomed to see.

"Business is generally reported to be good in volume, making an exception for the great hesitancy in the metal markets, especially in copper and the alloy metals. Voluntary concessions in the prices of these materials have made buyers wary and they are generally waiting in the hope of further declines.

"The iron and steel industry is going ahead under the pressure of orders previously booked for fall delivery, but it is conceded that the current inquiry is lighter, leading to shading of prices in pig and billets —the basic articles of the industry. The demand for consumption has been steadily in advance of production for many months, hence a slight relaxation in the demand is regarded with favor. Some fear is expressed lest the prevalent scarcity of money and the high returns demanded by capital restrict new ventures which otherwise would require a large tonnage of steel. Already it is noted that the specifications of structural materials are falling off and the

railways are buying guardedly because of the difficulties in the way of floating new capital issues.

"The feeling prevails, however, that with a continuance of activity, even on a somewhat lower scale, the railways will be compelled to buy steadily. In fact, the strength of the market for plates indicates confidence in the traffic situation and a steady increase in freight equipment.

"The unmistakable conclusion to be gathered from our replies on schedules touching the crop financing operations of the banks is that though yields may be deficient in quantity and quality these defects, in conjunction with an unabating consumption, will require practically as large a volume of funds as last year.

"It is within the purview of this summary to remark that the bankers of the country have been making fruitful use of the opportunity to instruct their customers in the proper employment of credit. Our correspondence clearly indicates that the temptation to trespass beyond the safe limits of trading hazards has been well nigh irresistible. Land, commodities, and all lines of industrial enterprise have held out alluring promise of large speculative gains. The banks have been appealed to for aid in these ventures; and it has been the duty of the banker to admonish his customers to audit their ventures, and to restrict their credits whenever impartial judgment has required it."

This report of the Commercial National Bank, based on the thousands of replies it has received from business men in all parts of the country in answer to its definite inquiries, is about the best assurance that we could possibly have that the business situation is sound at the core and that the future may be regarded with confidence.

Not a Shrinking Violet.

THE suit filed in the Supreme Court of the District of Columbia by Mr. James W. Van Cleave to restrain the American Federation of Labor and its officials from the further use of the "peaceful boycott," brought that gentleman once more into the limelight in which he delights to shine. No one would dream of calling the St. Louis stove man a "shrinking violet." On the contrary he manages to secure about as much free advertising and general publicity as would satisfy a dozen modest men.

By means of his official position as president of the National Association of Manufacturers, Mr. Van Cleave is able to keep himself in the public eye, and he has become an accomplished poser. His sensational suit—brought in the name of his stove company and hence accompanied by much free advertising—has so far had the effect of confirming the labor union officials in their determination to continue the "peaceful boycott," described by the Chicago Tribune as the mightiest weapon in the hands of organized labor. It has also resulted in the wide publication in the daily press of the American Federation's list of "unfair firms," including of course the St. Louis stove concern of which Mr. Van Cleave is the self-advertising head. By such publication in the dailies many thousands of people, who otherwise would never have seen the so-called "unfair list," have been informed that these concerns are under the official ban of organized labor.

The trouble between Mr. Van Cleave and the labor unions is peculiar to himself, if not of his own seeking. The stove manufacturing industry as a whole has been and is remarkably free from labor troubles. Pacific and satisfactory agreements between employers and employed have been made from time to time and honorably kept and Mr. Van Cleave, whose actions now indicate that he is seeking the sympathy of the public, must have gone out of his way to look for trouble when he aroused the decided enmity of the labor organizations.

A "Different" Corporation.

IT IS always pleasant to record business acts that reflect honor upon those who perform them and such an act has lately come to notice in the return by Butler Brothers to the Public Affairs Committee of the Minneapolis Commercial Club of the sum of $40,622.50, which was subscribed by the business men of Minneapolis when negotiations were under foot for the location of Butler Brothers' big house in that city.

When the negotiations began the committee were anxious to secure the big establishment for Minneapolis. They took up the matter with the business men of the city without Butler Brothers' knowledge. The policy of Butler Brothers in locating their various jobbing and distributing houses having been not to ask or accept anything that could possibly be construed as a bonus, they decided when they learned the facts to return to the Commercial Club the amount named, though this had not been paid to them in cash, but had been used through Mr. T. B. Walker of Minneapolis, who erected their building, to secure for them a lower rental basis.

In arranging for the return of the money Butler Brothers stipulated that it was to be returned to the individual citizens or firms that had subscribed it. This, of course, is to be done.

In commenting on the incident The Daily News of Minneapolis expressed the universal sentiment of the people of Minneapolis and the northwest when, under the heading, "Butler Brothers' Gift," it said:

> The announcement that Butler Brothers had turned back to the Public Affairs Committee of the Commercial Club the $40,000 which had been raised to secure a location for their firm in Minneapolis is one of the most gratifying exhibitions of public spirit ever made in Minneapolis or any other city.
>
> When it is remembered that the return of the money was accompanied by a letter paying a high tribute to the city's advantages and complimenting the business men who pulled together for the good of Minneapolis, it appears conclusively that the business relations which Butler Brothers have formed in this city must be eminently satisfactory.

The whole transaction is most creditable to all concerned and evinces a spirit happily not unheard of in business but rare enough to attract attention whenever it is exhibited.

We congratulate Butler Brothers upon their share in the transaction and also congratulate the enterprising city that has secured the location of one of their houses in its midst.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

Most of us have seen the familiar figure of a fisherman carrying a huge codfish, the head of which appears over his shoulder while the tail sweeps the ground—the same being intended to make us want a dose of cod liver oil. Having often gazed in admiration at the sight, I had a decided shock a few days ago, when a noise outside the office door attracted my attention and I looked up from my littered desk and saw a good imitation of the codfish man at the door. Bending beneath the load of a huge fish I discerned the face and figure of a well-known Chicago hardware retailer, Fred Ruhling of North Clark street, who proceeded to introduce me to a huge muskellunge, king of the game fishes of the Great Lakes and their tributaries. This was the prize booty of a Wisconsin fishing trip from which the popular hardware man had just returned—and I hesitate to state the weight and size of the fish. To the best of my recollection it was something less than sixty pounds and measured slightly under six feet from nose to tail. I may have slightly erred in these statistics, but fishing figures are elastic anyhow and I may be pardoned if I have overstated them. Besides, my statistics may be biased by recollection of the subsequent flavor of that inch-thick slice of baked muskellunge, cut from near the tail.

* * *

I am told in whispers that our friend Ruhling and his party had great luck in the wilds of Wisconsin. The scattered settlers did not exactly kill the fatted calf for them, but I am given to understand that there was venison in their frying-pan every day they were in camp. This may or may not be true, but at any rate they had no trouble with the game warden, such as once threatened a hunter in the state of Maine.

Gun in hand, he has met in the woods by a stranger who asked him what luck he had, the time being the close season for deer. Without thinking, the hunter replied: "Why, back here a little way I just killed the fattest buck I ever saw." "Indeed," said the stranger, "and do you know who I am?" "No," said the hunter, beginning to quail. "Well, sir, I am the chief game warden of the state of Maine." And quick as a flash the hunter rejoined, "And do you know who I am?" "I do not," said the warden, certain of his prey. "Well, I am the damnedest liar you ever saw," said the hunter—and went his way rejoicing.

Brother Ruhling reports that he and his party "brought out" their limit of fish and game, whatever that may be. You can trust a hardware man to go the limit. That muskellunge still tastes fine.

* * *

It is reported from Paterson, New Jersey, that John Sebastian, an Armenian hardware dealer of that city, has sold out his business and gone to Egypt, because of his fear of the Hunchakist society, the blackmailing organization of Armenians which is believed to extend its ramifications throughout the United States and to have been responsible for several recent murders of prominent Armenian Americans. It is said the Hunchakists demanded $5,000 from Mr. Sebastian and rather than pay this sum he sold out all his belongings and quietly left the country.

Mr. Sebastian's father, it is said, was killed in New York City three years ago and the family then removed to Paterson and opened a hardware store. The reports have it that Mr. Sebastian was never seen on the street, nor in any public gathering, and that in fact he lived a life of constant dread.

Several weeks ago he received a letter demanding the sum of $5,000 and setting a time in which it was to be paid. This communication bore the familiar signs of the dreaded blackmailing society and was evidently taken in deep earnest by Mr. Sebastian, for he told a friendly neighbor that he would be obliged to leave Paterson or lose his life—and then departed.

Such a condition of affairs in the United States is simply damnable. There is no use mincing words about it. It is a condition not merely to be condemned and regarded with abhorrence, but one to which every effort of the national and state governments should be bent with the resolve to end it. There should be no let-up in the efforts of the police powers and the federal secret service until the blackmailing, murderous organization has been pulled up and destroyed root and branch.

The soil of the United States has been too long polluted by the existence of the Hunchakist and similar societies. Instead of affording them nourishment and sustenance, our soil should be made unhealthy for them. They should be given a short shrift and no mercy. They belong in the class of the blackmailer, the kidnaper, the thug and the assassin, and if fool juries fail to convict individuals of this character upon their apprehension and indictment, we can only trust that some strong soul may arise with courage to mete out summary justice to them.

* * *

On a recent trip to Cedar Lake, Ind., I found a neat stock of hardware carefully arranged on commodious shelves in the butcher shop in rear of a busy general store. The proprietor saw nothing incongruous in the close association of shelf hardware with his juicy steaks and democratic pork chops, but said the arrangement was convenient for him and suited his customers, so what's the odds as long as they're happy? A stock of leather goods on those butcher-shop shelves might cause trouble by suggesting unpleasant comparisons with the steaks and chops, and I suppose there is little danger after all of the gimlets, tacks and wire nails getting worked up into the sausages.

* * *

I learn from a Peoria paper that "The Pekin Hardware Company, of Pekin, Ill., has secured the contract for the home of D. F. Lawley, on Hillyer street. The matter was settled yesterday and the work of installing it will be taken up at once."

I do not know just what "it" is that is to be installed and the item appears rather ambiguous on that point, but whatever "it" is I am sure our friends of the Pekin Hardware Company will do a good job.

News Siftings

The Lawrence Stove Mfg. Company has been incorporated at Buffalo, N. Y., with capital stock of $70,000, by E. E. Harris, F. C. Ives and C. F. Grady.

The Cleveland Castings Pattern Company has recently completed patterns for a line of furnaces for the Vancouver Furnace Company, Vancouver, British Columbia.

The Faultless Stove Company, of St. Charles, Illinois, has been incorporated with capital stock of $100,000. The incorporators are Benjamin W. Dodson, David M. Flynn, Gottlieb Walther.

A. G. Brauer Supply Company, 316-318 North 3d street, St. Louis, Missouri, promise prompt shipment of all stove dealers' supplies, castings and stove repairs at prices that will be found satisfactory.

It is announced that the Warren Stove Company, recently organized at Warren, Ohio, as successor to the Warren Steel Range Company, will manufacture high-grade gasolene ranges as well as steel ranges.

A. T. Hull, formerly secretary-treasurer of the Norton Hardware Company, Norton, Va., has bought the interest of G. C. Hawes in the Bristol Stove & Foundry Co., Bristol, Tenn., and assumes the management.

Patterns for stoves, ranges, etc., can be secured promptly from The Geo. W. Cope Stove Pattern Works Company, Brush and Woodbridge streets, Detroit, Michigan, who will send estimates, etc., on request.

The S. Obermayer Company, of Cincinnati, Ohio, manufacturers of foundry supplies, have just completed a factory for the exclusive manufacture of their new Kantbebeat Dry Core Compound, with a capacity of 25 tons a day.

F. Pickering of Sandusky, Ohio, a well-known manufacturers' agent for stoves, oil and gas stoves, etc., will move from Sandusky to Muncie, Indiana, early in September. His address in Muncie will be 425 West Howard street.

The Wrought Iron Range Company of St. Louis, Missouri, has purchased a manufacturing site, 150 x 220 feet, at Forest Park boulevard and Vanderventer avenue, St. Louis, and it is said will build a range plant there within the next twelve months.

Heinrich Witte & Co., stove manufacturers of Leuben-Dresden, Germany, have produced a handsome and artistic portable tile stove, with a regular fire pot in which any ordinary kind of fuel can be burned. It is handled in Berlin by W. Parlow, Friedrichstrasse 210, corner Kochstrasse.

The Bates Mfg. Company has been incorporated to manufacture stoves and furnaces at Wilkesbarre, Pa. The stockholders include Joseph G. Schuler, Frank R. Scounton, George S. Alexander, John M. Garman, Daniel L. Hart, Christian Walter, Morgan Weller, Adam Turkes, James M. Poland and Charles M. Bates, of Wilkesbarre.

Mr. R. B. Fleming, vice-president of Loewenberg & Going Company, Portland, Oregon, and superintendent of the company's foundry at Salem, Oregon, was in Chicago for several days this week, and reported the company's business booming to such an extent that increased facilities have become absolutely necessary. He says it is easy to enlarge the plant, but the difficulty is to secure labor.

The Union Pacific Railroad has recently issued a statement of the relative cost of repairs for its steel and wooden freight cars. The figures cover a period of two and one-half years and show the total cost of repairs for 11,227 steel cars of nine different types as compared with 10,568 wooden cars of seven different types. The totals indicate an average cost of repairs per car per month of $2.79 for the steel cars, as against $4.04 for the wooden cars.

A special dispatch from Sheffield, Alabama, to The Birmingham Ledger, August 12, said: "A carload of the latest improved stove patterns has just arrived for the foundry which is to be started in Florence by B. B. Cohen of Sheffield, president of the Sheffield Stove & Foundry Company. The delay in the arrival of the patterns has caused work on the foundry to be delayed also, but Mr. Cohen says that it will now be rushed to completion and that the plant will be operated on a larger scale than was at first intended."

The Cascaden Manufacturing Company of Waterloo, Iowa, manufacturers of farm machinery, heaters, etc., write THE AMERICAN ARTISAN that they do not anticipate establishing a branch house at Crookston, Minnesota, at the present time. Reports have been current that they intended to do so, but the wish seems to have been father to the thought on the part of the Crookstonians. They are hustling people in that Minnesota burg and if they don't get all they go after it is not their fault.

NEW STOVE CATALOGUE.

A new catalogue and price list for 1907-8 has been issued by The S. M. Howes Company, 40-46 Union street, Boston. The catalogue opens with the motto, "Howes Ranges Delight House Wives," and its forty pages are replete with illustrations of the numerous heating, confectioner and laundry stoves, farmers' boilers, oil heaters, water stoves, stove pipe radiators, etc., made by the company. There is a brief but graphic description of each item and the prices of the various sizes in each style are plainly shown.

The S. M. Howes Company ask stove dealers to remember when they get this new catalogue that the company offers to send any stove illustrated therein as a sample for the dealer's inspection and if the stove does not suit the manufacturer will take it back and pay for it both ways. This, they say, will give but very little trouble to the dealer and is well worth doing if he wants to be sure of getting what will please him. The new Howes catalogue will be sent to any dealer on request. When writing for the same, kindly mention THE AMERICAN ARTISAN.

THE HOLLAND WINDOW-CHUTE.

The Holland Furnace Company of Holland, Michigan, are now making their basement coal chute with a glass window feature which gives it the double

character of a basement window and coal chute all in one. When open for putting in coal, a metal plate or apron completely covers and absolutely protects the glass. When closed, this apron rests on locking lugs at the top of casing, locking the window and giving an unobstructed opening for the light into the basement.

The frame and hopper of the Window-Chute are all cast iron. The hinges are on the inside and invisible. The chute locks automatically from the outside, and cannot be opened except from the inside. For further details, prices, etc., address the manufacturers at Holland, Michigan, and when writing kindly mention THE AMERICAN ARTISAN.

THE QUICK MEAL RANGE.

The Ringen Stove Company, Div. American Stove Company, St. Louis, Missouri, issue a neat circular letter to be sent to housekeepers who are looking for a cooking stove, with the request that they examine the Quick Meal Range at their local hardware store. They quote one housekeeper, who recently said to a hardware firm of Ord, Nebraska, "I am doing my work on a "Quick Meal," with one-third the coal I used with my old range."

The letter continues: "Quick Meals are well built, look handsome, are splendid quick bakers, and thoughtful housekeepers know that a good range at a fair price is always the most economical. We don't build ranges for so-called 'Mail Order' or 'Catalogue' houses."

These letters are supplied to dealers to be mailed throughout their local territory. Catalogue and prices of Quick Meal Ranges will be sent to dealers by the Ringen Stove Company on request. When writing for the same kindly mention THE AMERICAN ARTISAN.

INDEPENDENT GAS RANGES.

The Independent Gas Ranges manufactured by the Independent Register & Manufacturing Company of Cleveland, Ohio, are made with full size eighteen-inch ovens and are warranted to be perfect bakers.
the sides.

The construction includes three thicknesses in the walls of the body—two of steel with a lining of asbestos. The top of the oven is constructed the same as

The object of the construction is to hold all the heat from the oven burner in the oven, as well as to add to the life of the range.

The Independent Ranges are made in various styles. A neat catalogue describes and illustrates each style, and will be sent on request. When writing the Independent Register & Mfg. Co., address 130-132 Water street, Cleveland, and kindly mention THE AMERICAN ARTISAN.

PITTSBURGH STEEL RANGES.

The Stove and Range Company of Pittsburgh call attention to the fact that their Cinderella, Good Luck and Tremont Steel Ranges are "made where steel is made." One of their latest achievements is the Countess Cinderella, a range of attractive appearance and self-evident quality.

The company confidently assert that their steel ranges are now the equal in fit and finish of any that have ever been seen in a dealer's store and that the materials used in their construction are the best that the world's steel center produces for the purpose.

The prices at which Pittsburgh Steel Ranges are sold enable the dealer to retail them quickly at good profits. The catalogue illustrating the complete line will be forwarded to any dealer on request. Address the manufacturers at Pittsburgh, Pennsylvania, and when writing kindly mention THE AMERICAN ARTISAN.

"NON-BUCKABLE" OVEN BOTTOM.

One of the distinguishing features of the Model Steel Ranges manufactured by the Portsmouth Stove and Range Company, of Portsmouth, Ohio, is the patented "Non-Buckable" oven botton. This bottom is made in four triangular sections, braced and bolted together, and is confidently claimed to "make good" the weakest point of steel range construction.

The manufacturers assert that this new patented oven bottom is the greatest improvement made in the construction of steel ranges for many years. Complete details of the exclusive "patented good things" in the Model Steel Range are given in the manufacturers' catalogue No. 18, for which dealers are invited to send.

When writing the Portsmouth Stove and Range Company, kindly mention THE AMERICAN ARTISAN.

BARLER'S IDEAL OIL HEATERS.

The Ideal Oil Heaters, manufactured by A. C. Barler Manufacturing Company, 104-106 Lake street, Chicago, are rapidly forging their way to the front as convenient and economical portable heaters for the store, the office or the home. They have received many hearty indorsements from those who have had them in actual operation and have found that they give plenty of heat without odor or smoke. They are also found to be easy and convenient to use and do not require repairs.

The makers claim they are just the kind of goods that pay the dealer to push sales and offer to ship a sample heater for examination to any dealer who wishes to see an oil heater that others say is by all odds the best. For detailed literature illustrating Barler's Ideal Oil Heaters address the manufacturers as above. When writing kindly mention THE AMERICAN ARTISAN.

During the seven months ending July, 1907, the imports into the United States amounted to a grand total of $876,043,246, an increase over the corresponding period of 1906 of over $136,000,000. Our total exports during the same period amounted to $1,069,-215,726, an increase of almost $100,000,000 over 1906. The excess of exports over imports during the seven months of 1907 was $193,172,480, this representing the balance of trade in our favor.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 42 to 47 inclusive.

Claude Smith is opening a new hardware store at Mongo, Indiana.

Ward, Kerr & Co., are a new hardware firm at Saginaw, Michigan.

The Detroit Wire and Iron Works has been incorporated at Detroit, Michigan.

G. W. Farmer has sold his stock of hardware at Benton, Iowa, to F. E. Gleason.

A. Sellers has sold his hardware business at McPherson, Kansas, to J. T. Hollis.

J. S. Jones has sold his hardware business at North Bend, Oregon, to Nepp & Harrigan.

J. G. Young has succeeded to the hardware stock of Young & Beyer, Valley Falls, Kansas.

M. M. Kendall has sold out his stock of stoves, etc., at Waverly, Kansas, to Brennecke & Heald.

John E. Nickel has bought the stock of hardware of A. D. Seybolt & Co. in Western, Nebraska.

F. W. Shotliff has bought the stock of A. A. Clark, stoves and hardware, Southwest City, Missouri.

The Rex Light and Stove Company of Milwaukee, Wisconsin, has been incorporated, capital $5,000.

D. F. Anderson & Co., hardware dealers, of Rosalia, Washington, have incorporated, with a capital of $20,000.

The Clatworthy Hardware Company has been incorporated at Denver, Colorado, with a capital stock of $40,000.

Gosselin & De Mars have been succeeded in the hardware business at Aurora, Kansas, by De Mars & Letourneau.

A. Young of Silverwood, Michigan, has sold his stock of hardware to Curtis and Selby Coffeen of Maysville, Michigan.

J. B. Sperry of Port Huron, Michigan, will remodel his hardware store at the corner of Huron avenue and Butler street.

The James E. Patton Company of Milwaukee, Wisconsin, has purchased the business of the Smith Paint & Varnish Co. of that city.

The Planters' Hardware Company of Wadesboro, Virginia, has been authorized to change its name to the Blalock Hardware Company.

The Garthwaite Hardware Company of Marion, Indiana, recently made a sale of one thousand kegs of sixpenny wire nails to a local box factory.

C. J. Swenson, 1711 George street, La Crosse, Wisconsin, a pioneer hardware dealer of that city, contemplates enlarging and improving his facilities.

The Improvement Association of Syracuse, Indiana, reports that prospects are favorable for securing the establishment in Syracuse of a wire fence factory.

The Fort Worth Hardware Company has been incorporated at Fort Worth, Texas, with a capital stock of $25,000 by G. H. Colvin, A. J. Roe, George Mulkey, Otho S. Houston, William Capps and P. E. Bell.

The building at 1568 Merwin avenue, Cleveland, Ohio, occupied by the McIntosh-Huntington Hardware Corporation, was damaged by fire August 11.

A. W. Shepard, who has been in the hardware business in Little Falls, New York, for forty years, retired from business August 1. He now resides in Troy.

The Sparta Brush Co. has been incorporated at Sparta, Wisconsin; capital stock, $100,000; incorporators: E. L. Nichols, E. E. Powell and W. G. Williams.

The plant of the Marquette Woodenware Company at Marquette, Michigan, was destroyed by fire August 17. The loss was $100,000. Sixty men were employed.

The Acme White Lead & Color Works, of Detroit, Mich., have established a southern branch warehouse at 304 Second avenue North, Nashville, Tennessee.

The Rose-Lyon Hardware Company of Little Rock, Arkansas, will put up a new one-story warehouse building, 50 x 150 feet, at Markham and Second streets in that city.

The Webber Hardware Co. of Laporte, Indiana, has increased its capital stock from $30,000 to $40,000. Chas. Bosserman is president and O. W. W. Grischow secretary.

The Gammel Hardware & Crockery Co. has been incorporated at Newport News, Virginia, with capital stock of $5,000; S. J. Gammel, president; J. H. Cosby, secretary.

E. E. Barnard has opened up a new hardware store at Morton, Ill., with the name "Diamond Edge" Hardware Store. He will do tin work and repair work of all kinds.

The Russell-Porter Hardware Company of Milwuakee, Wisconsin, is erecting a new two-story building on National avenue at West Allis, Wisconsin, to be completed by fall.

The Jackson Hardware and Buggy Company of Waco, Texas, has been organized; capital stock, $15,000. The incorporators are: S. B. Jackson, Allan D. Sanford and J. A. Jackson.

The Krohn Hardware Co. has been incorporated at Whitewater, Wisconsin ; capital stock, $10,000. Incorporators: Gustave H. Krohn, Francis F. Shoemaker and William H. Kennerd.

The file works of F. Westfahl & Co., Thirty-first and Cherry streets, Milwaukee, Wisconsin, were destroyed by fire recently, with a loss estimated at $500,000, partly covered by insurance.

The Grass Valley Hardware Company of Grass Valley, California, has elected the following directors for the ensuing year: D. E. Matteson, O. H. Root, S. T. Jones, L. P. Larue and J. L. Brooks.

The Rockford Lawn Mower Co. has been incorporated at Rockford, Illinois, to manufacture tools and utensils; capital, $10,000. Incorporators: Charles F. Jackson, Theodore Ekman, E. D. Renolds.

The Standard White Lead & Color Works of De-

troit, Michigan, has been incorporated with capital stock of $20,000. The stockholders are Arthur S. Capper, Lewis Coleman and Roy E. Coleman.

The Beehler Manufacturing Co. has been incorporated at St. Louis, Mo., with $50,000 capital stock to manufacture and deal in locks, hinges, etc., by C. W. Beehler, C. L. Beehler and J. F. Beehler.

B. F. Shreves, who recently bought the hardware business of Ekin Smith at 725 Second street, Fort Madison, Iowa, is selling out the stock of stoves and ranges in order to change his line of these goods.

The Fort Worth Heavy Hardware Company of Fort Worth, Texas, has been incorporated, capital stock $25,000. Incorporators: A. J. Roe, William Capps, George Mulkey, George W. Whyte and G. H. Calvin.

J. R. Cullen of Hartford, Connecticut, has gone to Japan and China in the interests of the Simmons Hardware Company of New York and St. Louis. He will be absent about two years and will visit India before he returns.

H. C. Chapin of Union, Iowa, has sold his hardware business to George Lepley, Jr., of that town. Mr. Chapin has been in the business for twenty-six years and has gained the respect and esteem of a large circle of friends.

The Fred Kroner Hardware Company of La Crosse, Wisconsin, filed an amendment to its articles of incorporation decreasing the number of its directors from five to four. John C. Kroner is president of the company and Frederick Kroner secretary.

The Frasier Hardware Co., of Kankakee, Illinois, owned by Frank and Armand Frasier, has been sold to A. E. Marcotte and P. T. Lambert, both of Kankakee. Mr. Marcotte is an experienced hardware man, and has been manager for the Frasier company.

The McGee-Ross Hardware Company has been organized at Jackson, Tennessee, capitalized at $49,000, with Messrs. W. B. McGee, Hugh Ross, John R. McKinnie, W. H. Briggs and Mike T. Baker incorporators. The company will do a wholesale and retail business.

S. M. Stone, formerly with the Simmons Hardware Company, St. Louis, Missouri, has been appointed sales manager of Colt's Patent Fire Arms Company, Hartford, Connecticut. Mr. Stone has represented the Colt company on the road for three years and now succeeds Second Vice-President Frank C. Nichols as sales manager.

The Drake Hardware Company of Burlington, Iowa, has purchased a large warehouse on Front street, adjoining the property of the hardware company, possession to be given January 1, 1908. The newly-acquired building is 60 x 60, three stories and basement, giving the Drake company about 15,000 square feet additional floor space.

The Sycamore Wire Fence Company, Sycamore, Illinois, is building a plant to be completed by September 1. The company was recently incorporated and is in the market for machinery equipment, including shapers, lathe, planer, drill, shafting and hoists, and a 10-horsepower motor. The board of directors is as follows: M. C. Munn, John L. Storey, E. Rudolph Youngren, Wm. J. Kennedy and T. L. Oakland.

The Williamsburg Manufacturing Co. has been incorporated at Northampton, Massachusetts, to manufacture tools, hardware, etc.; capital, $50,000. President, Arthur J. Polmatier, Williamsburg; treasurer, Joseph J. Noonan, Springfield; clerk, William C. Polmatier, Florence.

The Graham Nut Co. of Pittsburgh, Pennsylvania, will establish a branch office in Chicago at 1132 Commercial Bank building, on September 9, to be in charge of A. Schoonmaker, Western sales manager. The company manufacture nuts, bolts, rivets, washers, etc., and have just completed a modern bolt plant.

THE ATLANTIC CITY CONVENTIONS.

Arrangements are already being made for the meeting of the American Hardware Manufacturers' Association and the National Hardware (Jobbers') Association at Atlantic City, New Jersey, in October. A special hardware train will be run from Chicago for the benefit of Western members, their ladies and friends, and the fact that the arrangements for this train are in the hands of Mr. W. H. Bennett assure all who travel east by this means a royal good time and all the comfort possible.

"Pop" Bennett has fired the preliminary gun in his campaign for a large attendance and a successful trip by sending the following letter to those interested:

AMERICAN HARDWARE MANUFACTURERS' ASSOCIATION AND NATIONAL HARDWARE JOBBERS EN ROUTE TO ATLANTIC CITY.

Dear Sir:

The above Associations will hold their meetings at Atlantic City, October 23, 24 and 25, 1907.

Will you attend? If so, shall I make reservation for you on the Special Hardware Train from Chicago? Also, if you wish me to do so, kindly give me the names of those who will accompany you so that I can make reservations accordingly.

All details of the trip, including time of departure, etc., will be sent you in due time.

Awaiting your reply, I remain

Yours very truly,

W. H. BENNETT.

Chicago, August 19, 1907.

THE AMERICAN FORK & HOE CO.

New officers were elected August 13th for the American Fork & Hoe Company, of Cleveland, Ohio, as follows: W. H. Cowdery, president; F. S. Andrews, first vice-president; T. H. Russell, second vice-president; W. C. Mason, third vice-president; P. H. Withington, treasurer; E. D. Lowell, secretary.

By the election of Mr. Cowdery as president the company advances to its official head a gentleman of long experience in manufacturing and of great executive ability. He has been engaged in the manufacturing business since 1874, when he became connected with the Geneva Tool Company, continuing with that concern until 1880, when he transferred his services to the Ashtabula Tool Company. For twenty-two years Mr. Cowdery served the best interests of this company and on the organization of the American Fork Hoe Company in 1892 he became connected with the latter and has served with great credit

until the highest honors of the company were bestowed upon him at the recent meeting.

BUTLER BROTHERS' FALL CATALOGUE.

The fall catalogue of Butler Brothers, Chicago, has just been received, the new prices taking effect August 22d. The merchandise situation is reviewed in the interesting manner for which the editorial department of "Our Drummer" is noted, and merchants are urged to take advantage of the new catalogue to buy their holiday goods in time. The line of holiday goods is fully shown for the special benefit of far-off buyers.

A special feature of the catalogue is what Butler Brothers call "the $4.50 to $9.00 sale," which includes a large selection of goods to retail at 50 cents and $1. These are offered at $4.50 and $9.00 per dozen, there being in all about fifty articles of this kind which can be used as leaders.

The new fall catalogue is No. 627, and will be sent to any merchant for the asking. When writing Butler Brothers, kindly mention THE AMERICAN ARTISAN.

THE GEM RURAL MAIL BOX.

The "Gem No. 4" is a new Rural Mail Box added recently to the large line already manufactured by The Peck-Hamre Manufacturing Company of Berlin, Wisconsin. The claim made for this box is that it is of the popular oval top, end door type, but has distinctive features which aid materially in selling it, because of their practical value to the farmer. The features are the

Gem Rural Mail Box No. 4.

self-closing door, which automatically closes—thus doing away with the danger of the children leaving it open or of the wind blowing it open—and the inside letter holder, which is very conveniently arranged to hold the outgoing mail.

The jobbing trade are quite generally handling this box, but where they are not, the makers will quote direct. It might be well for dealers to write The Peck-Hamre Mfg. Co., for their Catalogue "E" containing net prices on many valuable hardware specialties. When writing kindly mention THE AMERICAN ARTISAN.

SECURITY LIGHTNING RODS.

The Security Lightning Rod Company of Burlington, Wisconsin, present in their recent advertising "Ten Good Reasons" why their Security Copper Tube Lightning Rods should be handled in preference to any other. A twenty-year guarantee accompanies every shipment of these rods and the manufacturers offer to refund all money received for the rods and in addition to pay $500 reward for the discovery of any building burned by lightning with their copper tube rods on in circuit form.

When writing the Security Lightning Rod Company for particulars of their goods, prices, etc., kindly mention THE AMERICAN ARTISAN.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

St. Louis, Missouri.—Patton & Maginnis Hardware Company, incorporated with a capital stock of $2,500.

Jena, Louisiana.—Farmers' Hardware & Furniture Company, incorporated with a capital stock of $10,000.

Rocky Comfort, Missouri.—Patterson Hardware Company, incorporated with a capital stock of $10,000.

BUSINESS CHANGES.

Waverly, Kansas.—M. M. Kendall has sold his hardware stock to Brennecke & Heald.

Loomis, South Dakota.—W. A. Barber and H. C. Clark have purchased the hardware business of M. Nelson and the implement business of Geo. A. Johnston.

Aurora, Kansas.—Mr. A. M. Gosselin has sold his hardware store to P. D. Letourneau.

Le Roy, New York.—Eben H. Buell's hardware stock has been sold to the Burritt Company.

Bussey, Iowa.—R. M. Mick & Company have sold their hardware interest to Chas. Dreibelbeis, who will move the stock into the Odd Fellows' Temple.

Yellow Spring, Ohio.—Charles Hackett has sold his stock of hardware to Mendenhall & Company.

Camden, Delaware.—Walter T. Massey has purchased the hardware business of T. Coke Chambers.

Bowling Green, Kentucky.—W. L. Constance and G. S. Hollingsworth have bought out the hardware stock of C. S Allen.

Central City, Nebraska.—Finley Dye has sold his interest in the hardware store of Ross, Dye & Cowgill to the other two members.

Marysville, Ohio.—William Conrad has disposed of his stock in the Emmert-Conrad Hardware Company to Edward Emmert and will leave for French Lick Springs, Indiana.

Osgood, Indiana.—T. R. Hartley has bought the Baylor hardware store.

Albert City, Iowa.—C. Lodine sold his interest in the Lodine & Danielson hardware store to his partner, Leonard Danielson.

MISCELLANEOUS.

Knoxville, Tennessee.—The Moore-Carpenter Hardware Company was damaged by fire.

Lexington, Kentucky.—Brock & Co.'s hardware store was badly damaged by fire.

San Francisco, California.—The Osborne Hardware Company was burglarized.

Bingham Junction, Utah.—The Alcorn hardware store was burglarized.

Fort Smith, Arkansas.—R. A. Hambric has transferred his stock from Garrison avenue to the Chauncey building on North Seventh street.

Rutledge, Missouri.—E. S. Uike has purchased a hardware store here.

Westmoreland, Kansas.—Zabel Bros. have moved their stock of hardware, etc., into the new D. E. Brown building.

Sedalia, Missouri.—J. B. Richter will move his hardware stock just north of E. R. Blair's store, because of lack of room.

Ashmore, Illinois.—The Coyle Bros. hardware store was burglarized.

Heron Lake, Minnesota.—K. V. Robson's hardware store was burglarized.

Parkersburg, Indiana.—Thieves blew open the safe in the hardware store of Samuel Royer; loss $1,200.

Phillips, Nebraska—The two sons of C. L. Arnett will open a hardware store about September 1st.

A RETAIL MERCHANTS' ASSOCIATION.

At the Boston convention of the National Retail Hardware Association Mr. Frederick Neudorff, of the Neudorff Hardware Company, St. Joseph, Missouri, explained to a number of the delegates the plan and scope of the Retail Merchants' Association of St. Joseph, Missouri, of which he is the active president. In a recent communication to THE AMERICAN ARTISAN, Mr. Neudorff says: "The hardware men to whom I explained our plan at Boston were greatly interested in it and I have received letters since I returned home asking for further information. I send you a copy of the St. Joseph News-Press, containing the advertisement of our Retail Merchants' Association, with our rebate plan and references to our work. If you will make as much of a reprint and story of this matter as possible it will answer the inquiries that have come direct to me and which I am unable to answer in detail.

"You will find," continued Mr. Neudorff, "that the members of the association advertise that their advertisements are guaranteed by the association. This and our general plan of rebating railroad fares, etc., have worked beautifully here and have brought many hundred thousands of dollars of business to St. Joseph.

"We do not feel that this method of acquiring business is of special detriment to the small dealer in country towns, because there is a certain element of population in all communities that will trade away from home and we are by this means trying to get that element to come to St. Joseph, which is being done very successfully."

The Retail Merchants' Association of St. Joseph is intended to promote closer trade relations between the people of the territory surrounding St. Joseph and the merchants of that city. It is now entering on the third year of its life. Its members are among the leading merchants of the city and its officers and directors, it is said, give generously of their time to promote its objects. The officers are: Frederick Neudorff, president; O. E. Martin, vice-president; F. L. Smith, secretary; W. F. Kirkpatrick, treasurer.

SCOPE OF THE ORGANIZATION.

As to the scope and purposes of the association, President Neudorff is quoted by the St. Joseph News-Press as follows:

"The Retail Merchants' Association of St. Joseph has the confidence of the buying public at home and abroad, and the good will of the business element of the community, which they have tried to deserve by their strict adherence to high ideals of business life. It is to their credit that they first sensed the opportune time for the forward movement for a greater St. Joseph, and from halting, hesitating methods have developed into broad-minded, generous, progressive patriots in the battle for a greater St. Joseph. The officers and directors have a keen sense of the importance and a more than justifiable pride in this achievement. Not the least of their successes has been the proving of the fact that, despite the keen competition of business life, mutual respect, confidence, esteem and brotherly forbearance are possible and actually exist.

"The association has many unique features in operation, and though many of its innovations were considered radical, revolutionary and impractical at first, experience has proven their wisdom. The unity of action among the governing body is a pleasure and an inspiration to those familiar with its work.

"It has to its credit the initiative of interurban railway facilities, and on all public questions has not hesitated to do its full duty. Among its defined purposes of the future is the elimination of all false and misleading advertisements from the daily press and other mediums, and to make every dollar spent for advertising worth 100 cents to the buyer. It will also make an effort to bring those elements of our citizenship that accept fully all its responsibilities the grateful and material appreciation of the progressive elements of the community. This course is defendable on the highest basis of equity and is the only true method of upbuilding cities. 'To him who gives shall be given.'

"The association has also contracted for an art exhibit (second to none) to be given this fall, which proves its interest in the esthetic welfare of our people. We trust it will continue to be governed wisely, and that its influence will be along the lines that have made it so respected and powerful in our community."

FREE RAILROAD FARES.

The rebate plan is thus announced in a full page newspaper advertisement:

Free railroad fares to and from St. Joseph, given by the Retail Merchants' Association under the following rules:

First—Get free rate book at office, 414 Felix street, before making any purchase.

Second—Have all purchases placed on rebate book. When through, present book at office with railroad ticket and receive your money.

Rules governing the amount paid to the visitor by way of rebate of railroad fares are as follows:

For a purchase of $10.00, fare rebated within a limit of 25 miles one way.

For a purchase of $20.00, fare rebated within a limit of 50 miles one way or 25 miles both ways.

For a purchase of $40.00, fare rebated within a limit of 100 miles one way, or 50 miles both ways.

For a purchase of $60.00 or more, fare rebated within a limit of 150 miles one way, or 75 miles both ways.

These fares in any event to be paid only to your station.

No more than one fare will be paid on any one rebate book.

Then follows in the full-page advertisement a complete list of the firms in St. Joseph that are members of the association and these members add to their own advertisements in the St. Joe papers some such announcement as this:

"We are members of the Retail Merchants' Association, which rebates railroad fares to out-of-town buyers. This advertisement is also guaranteed by the Association."

The guaranteeing of its members' advertisements by the association is a novel idea and is reported to have proved a success. The merchants make good everything they promise in their advertisements and send the out-of-town customers away fully satisfied.

Copies of the newspaper containing the advertisement of the association and those of its members are freely circulated in the territory surrounding St. Joe, with the results referred to by President Neudorff in his communication to THE AMERICAN ARTISAN.

The stove and tinning business of F. B. Karl, 58 North Main street, Delaware, Ohio, has been consolidated with the Delaware Supply Company, and the consolidated business will be operated under the latter name at the present quarters on South Sandusky street, Delaware. Mr. Karl will join the company as a stockholder and the working capital will be increased.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

We reproduce on this page another of the dated advertisements of J. A. Marshall & Co., of Manito, Illinois. The chatty character of the Marshall ads. is highly commendable. One of the prime objects of advertising is to interest the reader, and if by the use of conversational language you can succeed in making the public read the argument for your goods, your advertisement is most likely to be successful.

A small number of typographical errors mar the effect of this advertisement somewhat. Ill-spelled words are an eyesore to many readers and it should be the duty of every advertiser to see that his advertisement is not only set up attractively by the printer but that it is set up correctly and that errors of spelling in particular are avoided.

The Marshall advertisements are especially pleasing as a whole and possess a character all their own. They are cleverly arranged and in their typographical

The Doctors Say

THAT malarial fever is often caused by mosquito or fly bites. True or not there's much satisfaction in hearing them buzz on the outside of your screen doors or window screens. Months ago we prepared for the coming of these nuisances by laying in a large stock of all kinds of plain and fancy window screens and doors. We carry the window screens in the frame, half window size and full window size, as well as the adjustable screen in a new and improved design. We have in stock all widths of wire cloth, also builders wire cloth, galvanized, half inch mesh. When needing wire cloth, screen doors and windows, seek us.

Our Forefathers

IN the olden time used axes for lawn mowers. But this was a makeshift of the remote past, and will not pass muster in this progressive age. Lawn Mowers today are not only a convenience but an absolute necessity. We have these indispensible tools in great variety, and at all prices from $2.75 to $10.00. With our usual care in buying we have purchased none that we cannot positively guarantee, and know that they are thoroughly all "right", to every detail. We have an Ideal Lawn Mower Grinder with which we can grind your lawn mower and make it cut as well as when it left the factory. Bring us your old machine and we'll make it as good as new.

All Work and No Play

AMERICAN BASE BALLS.

MAKES Jack a dull boy, in an old thread bare adage, but a true one nevertheless. The National game of Base Ball is one of the most popular as well as the most healthful games that is played by Young America. Recognizing the fact that there is a demand for a large and well assorted stock of base ball goods, we have again laid in a fine line of Base Balls of all kinds and styles, at all prices. Bats, different sizes and kinds, at all values, Catchers mitts, several varieties, Masks, best grades and everything else in the sporting goods line. Don't be oblivious of the fact that our prices are as low as the lowest quality being considered.

J. A. MARSHALL & CO., MANITO, ILLINOIS.

JUNE 6, 1907

appearance invariably command attention. The space used is of good size, usually 8 or 9 inches three columns wide.

* * *

The advertisement of the C. A. Peck Hardware Company of Berlin, Wisconsin, which we reproduce in reduced size, originally occupied a space of five inches, two columns wide, in a Berlin newspaper. The advertisers request a criticism of it and we suspect that when they sent it in to us they realized that they had constructed a good advertisement and one of which any concern might be proud. It possesses all the essential features of an effective advertisement, which we have sometimes summed up as follows: Attractiveness to the eye, an argument for the goods, judicious use of cuts, and plain naming of prices. It might possibly be objected to the advertisement that it is a trifle crowded and that the space allotted to the Gem Mail Box and the Jewel Latch are not sufficiently distinct, but the printer has done his best with the space at his disposal and has set up a telling advertisement.

The reading matter is of an interesting character and presents a sound argument for the mail box and the latch. The cuts are of a live character, prices are

Why Pay $1.00

for the common kind of mail box with constant danger of door being left open or blown open and the mail destroyed when you can get

The Gem No. 4 for $1.00
With Self-Closing Door

Besides being convenient and durable, it's an ornament to the best kept front door yard.

Price 25c

Price 25c

"The Jewel latch is sure to catch."

All STEEL. Large handles on both sides. Unlike other barn door latches, it cannot be easily and noiselessly removed with a screw driver when it is locked.

It's a 50c Value at a 25c Price.

THE C. A. PECK HDWE. CO.

BERLIN, WIS.

We Give Coupons for the Courant's Popular Lady Contest.

prominently named in an interesting manner, and the general appearance of the advertisement is of a character to attract and hold attention.

Such an advertisement, it seems to us, should produce results. It has the right kind of pulling quality, and we have not the slightest doubt but that it paid the advertisers.

There are two kinds of criticism, favorable and unfavorable. It is a pleasure to be able to criticize favorably such an advertisement as this of the C. A. Peck Hardware Company.

TAKING A PERSONAL INVENTORY.

Do you ever stop to take stock of yourself? You know how important it is to take stock of what you possess in the way of goods in the store. Well, it is just as important to take a personal inventory. Look into your way of living, of doing business, of your daily intercourse with your fellow men. See if some of the stock wouldn't be better put on the bargain counter and gotten rid of as soon as possible. See if it would not be wise to put in some new stock, say, of sun and laughter. Take care of the shelves and replace the line with hope. Stock more optimism and auction off pessimism. Lay in a new stock of human interest; brighten up the whole stock, let in the sunlight. A mental inventory is the best tonic that a business man can take. Try it.—St. Paul Trade Journal.

Heating and Ventilating

INSTALLATION OF WARM AIR FURNACES.

BY R. S. THOMPSON, SPRINGFIELD, OHIO, AND JAS. H. BROWN, ROCHESTER, N. Y.

Select a furnace of ample size for the required work. Some contracts may be lost by doing so, but there is no surer way of establishing a good reputation than by using furnaces of large size.

The furnace should have one square inch of grate surface to two and two-tenths of "equivalent glass surface."

Locate the furnace as near as possible to the center of the area to be heated. This will usually result in the pipes radiating more uniformly in all directions from the furnace and secure better results than if the greater number are taken from one side. If found necessary to vary this on account of chimney or other obstruction place it to the side of the center toward the prevailing winds.

Try the foundation with a spirit level before placing the furnace. A cement cellar bottom will usually need leveling up. If a dirt bottom, build a foundation of brick or stone, laid in cement. It should extend beyond the periphery of the furnace base sufficiently to insure stability. A pit foundation is preferable if it can be kept free of water.

In deciding which way to face the furnace, be governed more by the fresh air inlet connection and the smoke pipe than by the coal bin.

Partly fill the cup joints with cement and finish with fine, dry sand or kaolin.

If the furnace casing is made with a truncated-cone hood, there should be an inverted cone of tin inside the top, to divide the current of hot air and assist in distributing it to all the pipes.

If a flat top casing is used, group the pipes as near the center as possible, where they will get the hottest air.

An inner lining of tin riveted to the casing will lessen the loss of heat in the cellar. But by all means suspend a black sheet lining about an inch from the inside of casing. This will act as a powerful supplementary radiator. The relative radiating power of tin is given as 27 while that of black sheet iron is 345. As air is heated only by contact with a hot surface it will be seen that these black sheets very materially increase the heating capacity of the furnace.

The use of asbestos lining is open to objection and it is a question if it serves any good purpose.

PROPER SIZES OF PIPES.

The capacity of each hot air pipe should be proportionate to the size of the room to be warmed, allowance being made for exposure and glass surface. If more than one register is used on a pipe, the size should be increased proportionately. Tables are published giving definite information on this point. A good general rule is to allow one square inch of cross sectional area of hot air pipe to two and one-tenth square feet of "equivalent glass surface." Very good results are obtained by the use of deflecting registers where from two to four registers are served by one pipe.

Cellar pipes should in all cases be run straight where conditions permit. Use elbows made with as large a sweep as possible. It is stated that a 12-inch elbow with a 6-inch throat has a resistance equal to 121 feet of straight pipe; while an elbow of the same size, with a 60-inch radius has a resistance equal to 8 feet of straight pipe.

The fresh air duct should have a capacity of at least two-thirds the aggregate area of all the hot air pipes. It is good practice to supplement this by the use of a cold air exhaust pipe from the hall on first floor. If this is done, the combined area of the two should be equal to the combined area of all the hot air pipes. The inlet should be on that side of the house which will result in the air traveling with the prevailing winds not against them.

A damper or slide should be provided, but it should not be made so that the passage of air can be entirely shut off.

If the duct is run over head, care should be taken that the vertical shaft does not drop too near the furnace. There is danger that the air may become rarified by heat radiated from the furnace and cause a back draft or out flow instead of an inflow.

The draft of the furnace should be controlled by a lift check damper connected with the smoke pipe. An excellent method of attaching it is to extend the smoke tee down vertically for about two feet below the smoke collar and attach a 90 degree elbow on the lower end. In this elbow place a lift check damper. In this arrangement there is no danger of escaping gas. The check damper and the direct draft in the ash pit door should be connected by chains with a plate on the first floor, from which point they may be operated.

Mark each hot air pipe near the furnace, designating the room which it serves, so that the dampers may be operated in the cellar without confusion.

Stipulate in the contract that the owner is to furnish a chimney of good and sufficient draft.

SOME RULES FOR CALCULATION.

To ascertain the wall surface in a house wholly exposed, with no re-entering angles, add extreme length to extreme breadth, multiply by combined height of ceilings and multiply product by 2.

To ascertain the number of cubic feet of air per minute at a temperature of 140° required to maintain a temperature of 70° with the outside temperature at zero; divide the number of square feet exposed wall surface by 2. If air at 210° is to be used divide by 4.

To ascertain in square feet the area of air supply divide the exposed wall surface by 600.

To ascertain the grate surface required where all outside air is used divide the exposed wall surface by 900. When all inside air is used divide by 1,500. The product is square feet of grate surface.

To ascertain area of leader pipe for a first floor room where pipe is not over 15 feet long and has no bad bends divide exposed wall surface of such room (in square feet) by 3. The product gives area in square inches. If pipe is over 15 feet long add 20%.

To ascertain the area in square inches of the leader pipe for a second floor room, divide the number of square feet exposed wall surface of such room by 6, if pipe has no bad bends and is not over 15 feet long. If over 15 feet long add 25%. If over 25 feet long add 50%.

The area of a perpendicular stack should be two-thirds that of the leader pipe feeding it.

A 45° horizontal bend in a leader pipe should be compensated for by an increase of 20% in area. A 90° bend should be compensated for by an increase of 30 to 40% in area.

One cubic foot of air at 210° will supply as much heat as two cubic feet of air at 140°.

It requires one-third more heat to heat two cubic feet of air from zero to 140° than is required to heat one cubic foot from zero to 210°, consequently in using outside air there is fuel economy in using the higher temperature, an economy which is partly offset by the fact that an increase in temperature of air means an increase in temperature of waste to chimney.

In using all inside air there is no economy in the higher temperature and better results are obtained in distribution of heat by using air at a low temperature with large volume and high velocity.

[The above was read at the recent annual convention of the National Association of Master Sheet Metal Workers.]

A NEW THATCHER CATALOGUE.

The Thatcher Furnace Company of New York and Chicago are sending to the trade a new catalogue of their line of warm air furnaces, opening with a full page bird's-eye view of the foundry at Newark, New Jersey. The catalogue comprises in its thirty-two large pages a great deal of valuable information regarding the Thatcher line and also useful tables of capacity, etc., for the benefit of the furnace man who installs Thatcher furnaces. Particular attention is paid

to the Improved Thatcher Tubular Furnace and its unique and distinguishing features. This furnace was the invention of Mr. J. M. Thatcher, who spent over forty years in manufacturing warm air furnaces and the study of ventilation. The Thatcher Combination Heater and the Prize, Meteor, Crescent and Active Warm Air Furnaces are also splendidly illustrated and fully described in the new catalogue, which closes with a number of telling testimonials to the effectiveness and economy of Thatcher furnaces.

A copy of the new catalogue will be sent to any furnace man on request. When writing for it kindly mention THE AMERICAN ARTISAN.

THE KELSEY AGENCY.

The Kelsey Heating Company, of Syracuse, New York, are pointing out to the trade that competition has become so keen in the heating business in some localities that the man with an ordinary line of furnaces is handicapped, and they assert that no matter how severe the competition may be the man with a Kelsey agency stands in an impregnable position.

The Kelsey Warm Air Generator is backed by years of successful manufacturing and of satisfaction in extensive use. The makers say they are prepared to cite many instances where dealers who have been plodding along every year with dwindling sales have taken the agency for the Kelsey with immediate benefit to their heating business. They, therefore, wish to send their exclusive Kelsey agency proposition to furnace dealers and complete details will be sent to anyone interested who sends in his name and address.

When writing the Kelsey Heating Company, kindly mention THE AMERICAN ARTISAN.

WOODEN REGISTERS.

The Wooden Ventilator Co., of East Palestine, Ohio, in calling attention to their Hard Wood Cold Air Register Faces, offer to send a sample to any furnace man on request. They say these new wood Register Faces will prove a strong advertisement for the dealer and may be the means of making many furnace sales. The wood faces are claimed to be as strong as the iron ones and fit flush with the floor, giving as much air space as the iron registers.

The Wooden Ventilator Co. make these registers for the floor, hall seats and side walls, in every shape, and will send their printed matter and price list, as well as sample, for the asking. When writing the company, kindly mention THE AMERICAN ARTISAN.

PARAGRAPHS.

The furnace manufacturers of the middle west, who met in Chicago July 16th and formed an organization for mutual benefit, will hold their next meeting in Chicago on Tuesday, September 3d.

A free site at Grand Forks, North Dakota, has been offered to a radiator company—name not given—which is reported to be seeking a location for a branch factory in the Northwest.

The Advance Radiator Company has been organized in Syracuse, Indiana, to manufacture radiators, etc. The company is capitalized at $60,000. The stockholders have elected Lewis A. Neff, Silas L. Ketring, Elmer E. Strieby, Charles B. Bentley, Timothy Holland and B. I. Holland directors for the first year. Timothy Holland is president and general manager; Chas. B. Bentley, secretary; Silas L. Ketring, treasurer. Carey Wright will be superintendent. The company acquires the plant now in operation at Warsaw, Indiana, under the name of the Reynolds Heater Company, which will be continued in operation until buildings are constructed and equipped at Syracuse, when the machinery and merchandise will be moved there.

OBITUARY.

Homer Parmelee.

Homer Parmelee, of Chicago, died at the home of his brother, Justin Parmelee, 1056 W. Monroe street, Chicago, on Monday, August 12, in his eighty-ninth year. He was born at Middlebury, Vermont, December 31, 1818, and was the oldest of twelve children of Howell Parmelee, of West Troy, New York, the inventor of the coal or wood cook stove known in those early days as the Parmelee Diamond Cook.

Homer Parmelee was a pattern maker by trade, and was employed for years by Bartlett, Hayward & Co., of Baltimore. He developed an inventive genius and originated many practical machines of the boiler shops. In his eightieth year he patented the Parmelee pipe wrench, which he was successful in marketing at Philadelphia. After five years' enjoyment of the fruits of his latest invention Mr. Parmelee failed in health and came to Chicago to live with his youngest brother Justine, to whom he transferred the burden of his business affairs, slowly declining until the end.

Henry Baumann.

Henry Baumann, of Woodhaven, Long Island, New York, died August 6 after a long illness. Mr. Baumann was born in Switzerland January 1, 1847, and came to the United States in 1864. He first lived in Brooklyn and in 1865 moved to Woodhaven, buying the premises at Benedict and Grafton avenues, and started a hardware store, later adding a furniture department. He continued the business to the time of his death, and it is now the oldest established business in Woodhaven. Mr. Baumann was prominent in politics and was formerly an excise commissioner.

Keene Jackson.

Keene Jackson, secretary of the Kansas City Roofing & Corrugating Company, Kansas City, Missouri, died in that city August 4th at the age of 45. Mr. Jackson had lived in Kansas City since 1881, and was a man of estimable character, with many friends.

T. J. Hutchinson.

Thompson J. Hutchinson, aged 56, died August 14, at his home at Glade Mills, Butler county, Pennsylvania. He had been engaged in the oil business and was also interested in hardware and tinning.

Tinshop

THE TIN PLATE RESOLUTIONS.

One of the most important steps taken by the delegates at the recent annual convention of the National Association of Master Sheet Metal Workers was the adoption of certain resolutions offered by Mr. E. W. Richards of Philadelphia, one of the trustees of the association, and intended to aid the organized movement to restore tin plate to its proper leading place among roofing materials.

The resolutions adopted by the convention were as follows:

WHEREAS, one of the main causes of working injury to the tin roofing business of the country has been the practice of catering to unscrupulous jobbers, builders and roofers in the sale and use of plates stamped to suit the convenience of same; and

WHEREAS, much deception has been practised in second and third hands by the misrepresentation of Waster plates as prime plates and of light coated sheets as heavily coated: We, the Delegates in Convention assembled in Cleveland, believe that all efforts on the part of manufacturers to eliminate such malpractice and to lift the industry to a higher plane, should have the stamp of approval of all roofers of the country.

THEREFORE, BE IT RESOLVED, that we, the National Association of Master Sheet Metal Workers in convention assembled, appreciate and commend the action of The American Sheet & Tin Plate Company, in stamping their Terne plates with the amount of coating carried thereon, and in the stamping of all Waster plates made by them with the word "Waster." We respectfully suggest, however, that in our opinion it would be better for roofing purposes if this were stamped in the center of the sheet. Further, we believe and urge that if all manufacturers of Terne plates would follow this practice, many causes of complaint would be removed, with the final result that roofing tin would be restored to a position of confidence and supremacy to the exclusion of other forms of cheap roofing.

Few will be found to grudge the American Sheet & Tin Plate Company the meed of praise accorded its action by these resolutions. Every honest effort to lift the tin-roofing industry out of the slough of despond into which it had fallen, deserves credit and the support of all sheet metal workers.

The unscrupulous sale and use of tin plates stamped in any old way to suit any buyer was probably truly described in the resolutions as one of the many causes that have worked injury to the tin-roofing business of the country.

The deception that has been practised by the misrepresentation of waster plates as good tin plates, referred to in the preamble of the resolutions, was also strongly to be condemned as a detriment to the industry and the respectful suggestions to the American Sheet & Tin Plate Company as to the improvement of its waster stamp, and to all manufacturers of terne plates to follow the same practice, should carry much weight.

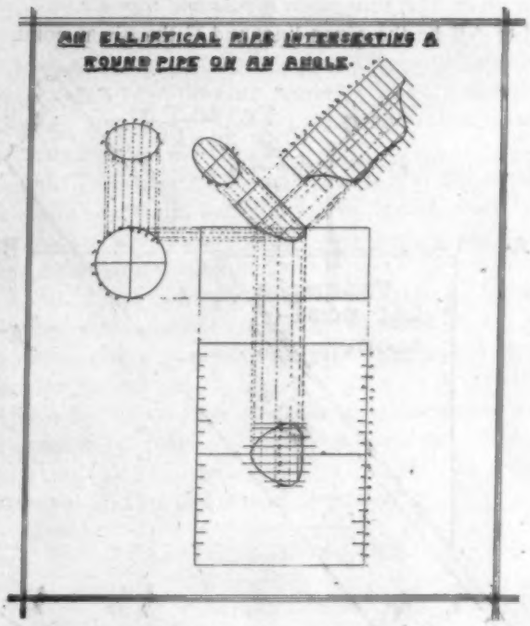
Reforms in the method of marketing tin plate, such as those suggested by the Master Sheet Metal Workers, may not immediately place tin where it properly belongs as a roofing material, but would undoubtedly help to secure that desirable end.

SHEET METAL PATTERN DRAFTING.

The accompanying illustration shows what can be accomplished after a little study of sheet metal pattern drafting. The drawing was made by Mr. Warren G. Overpack of San Francisco in his fourth month of study with Gray's School of Pattern Drafting, 1028 Jackson avenue, New York City.

The Gray school is now offering a three months' trial for $5.00 to any one who wishes to take up pattern making. If at the end of the three months the student wishes to take the remainder of the twenty-five months' course he may continue and the $5.00 paid will be credited to the full course.

Circulars giving complete information regarding



the course, also sample blue print drawing, will be sent on receipt of four cents postage. Address Gray's School as above and when writing kindly mention THE AMERICAN ARTISAN.

CORRUGATED EXPANDING CONDUCTORS.

Plecker's Corrugated Expanding Conductors, which are marketed by Clark, Quien & Morse, of Peoria, Illinois, are made of galvanized iron in ten-foot lengths. They are recommended to tinners by the manufacturers as having no cross seams and possessing the decided advantage that they will not burst when full of ice.

Descriptive literature and price list will be forwarded to any tinner interested on request. When writing the makers, kindly mention THE AMERICAN ARTISAN.

ELLER STEEL CEILINGS.

Some very artistic advertising is being done by the Eller Manufacturing Company of Canton, Ohio, in forwarding the sale of their steel ceilings and side walls, etc. There is no note of uncertainty in their statement that steel should be used for such purposes "because it is the most modern, sanitary, and inexpensive material and practically lasts for ever."

The company will go into the matter very thoroughly with any one contemplating rebuilding or renovating any sized room, if they will write giving dimensions and particulars.

Address the Eller Manufacturing Company, Canton, Ohio, and when writing kindly mention THE AMERICAN ARTISAN.

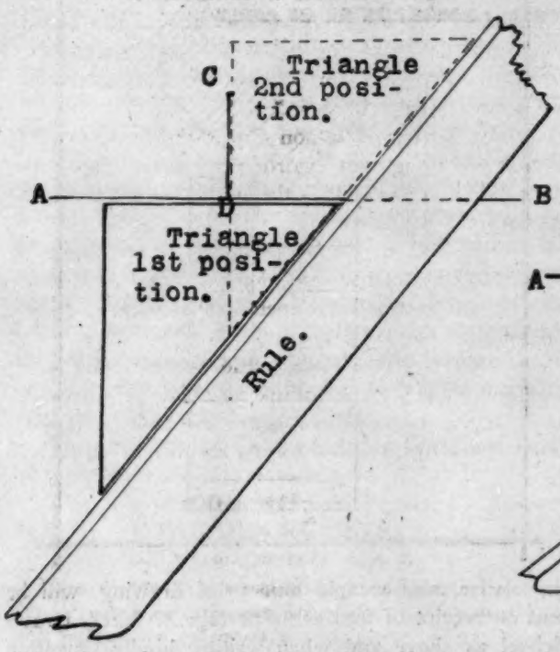
WHAT A SHEET METAL WORKER SHOULD KNOW.

BY H. E. OSBORNE.

NO. 7.

To draw a line to a given point, and perpendicular to a given line, using only a rule and triangle.

Let AB be the given line, and C the given point.



Place the long edge of the triangle against the rule with the other long edge resting on the line AB. Then holding the rule firmly, slide the triangle along until the short side touches the point C. Then draw CD and it will be perpendicular to the line AB.

Of course, only a right-angled triangle, as shown, can be used.

With the same tools, to draw a line to a given point, and parallel to a given line.

Let C be the given point, and AB the given line.

Place the rule and triangle the same as in the previous example, and slide the triangle until the top edge just reaches the point C. Then draw a line along the top edge from C towards D, and it will be parallel to the line AB.

To find the length of an arc, when the number of degrees it contains and the radius are known.

Multiply the number of degrees by the decimal .01745, and that product by the radius.

To find the area of a sector when the number of degrees and radius are known.

Find the length of the arc by the preceding rule, and multiply this length by one-half the radius.

To find the area of an oval or ellipse.

Multiply the two axes together, and their product by the decimal .7854 and the result will be the required area.

To find the area of a circle.

1st. When the circumference and diameter are both known, multiply the circumference by one-half the radius (one-fourth the diameter), or multiply one-half the circumference by one-half the diameter.

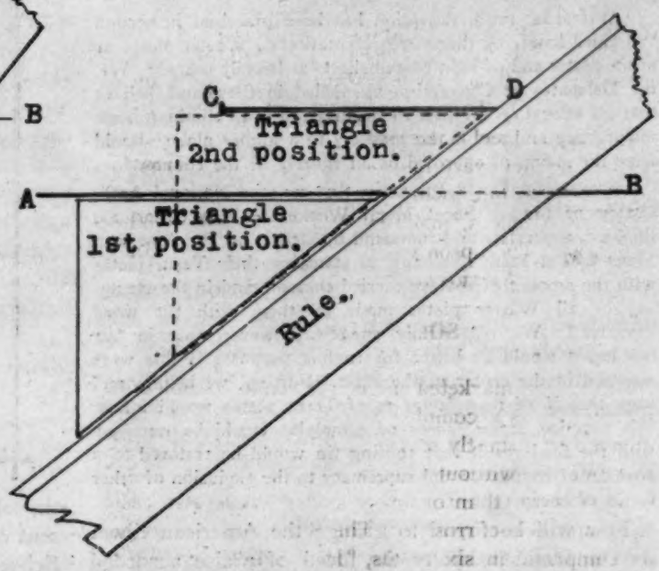
2d. When the diameter only is known, square the diameter and multiply by the decimal .7854.

3d. When the circumference only is known, square the circumference and multiply by the decimal .07958.

To find the contents of cylindrical vessels.

Multiply the square of the diameter in inches by the height in inches, and this product by the decimal .0034. The result will be the gallons, and decimal fraction of a gallon.

This is a shorter method than finding the cubic



inches and dividing by 231, and the result is exactly the same.

IWAN'S REVOLVING CHIMNEY TOP.

Iwan Bros., of Streator, Illinois, are finding a large sale for their Volcano Revolving Chimney Top, which can be obtained from jobbers of hardware and tinners' supplies. This chimney top is designed to secure a better draft in the chimney, and when it is attached to the chimney many users admit that it secures this desirable result. The top is made in all regular sizes from 6 to 12 inches. A complete catalogue and descriptive literature will be forwarded promptly on request. When writing Iwan Bros. for their catalogue, prices, chimney top literature, etc., kindly mention THE AMERICAN ARTISAN.

METAL CEILINGS AND WALLS.

An American consul in a growing German city states that metal-plate ceilings and side walls are almost unknown in that part of the Empire. Nearly all of the ornamentation of ceilings is done in heavy stucco work or wood, and a novelty in that line, such as

produced by American manufacturers, would be welcomed by builders. He has, therefore, taken up the question with a merchant doing business in all varieties of building supplies. This dealer has travelers visiting the neighboring towns, who would show plates and designs of American supplies and explain the advantages of metal decoration. It would be well to write the business man in German, quoting prices, c. i. f. Hamburg, forwarding illustrated catalogues and small samples of the goods. The Bureau of Manufactures, Washington, D. C., will furnish the name and address. Mention File No. 1253.

THOMPSON'S BOAT PATTERNS.

H. F. Thompson of Decorah, Iowa, has lately prepared a new set of patterns for his 1907, Model G, No. 20 Torpedo Steel Family Launch. Thompson's exact size patterns are printed on paper so that any novice can understand them, and the details of the material to be used, also blue prints and photographic prints showing the process of construction are included with the patterns. In fact, Mr. Thompson is successfully endeavoring to fill a long-felt want for a line of metal boats that can be built in any shop with ordinary tools.

Galvanized steel boats are practically indestructible and will neither warp nor shrink, and the patterns for the Thompson line include the equipment of the boats with air chambers, making them unsinkable. When writing Mr. Thompson regarding these patterns kindly mention THE AMERICAN ARTISAN.

SOLDERENE.

The article marketed under the name of Solderene is described as a complete soldering equipment. It is intended to instantly solder gold, silver, copper, brass, iron, tin, etc., without using acids or fluxes, and is said to be stronger than ordinary solder, while also clean, rapid and non-corrosive. The directions for its use are comprised in six words, "Heat article and rub on solderene." One stick is claimed to be sufficient for 50 to 200 joints, connections or repairs. Solderene is manufactured by the Solderene Company, who will send complete descriptive literature on request. Address Solderene Company, Dept. M, 53 State street, Boston, Massachusetts, and when writing kindly mention THE AMERICAN ARTISAN.

TIN ROOFING AND INSURANCE.

Merchant & Evans Company of Philadelphia have published in neat booklet form the paper on Tin Roofing and Insurance as relating to fireproof roofing which was presented to the National Association of Master Sheet Metal Workers at their recent convention in Cleveland, Ohio, by Mr. Powell Evans, president of the company.

The booklet is illustrated with excellent photographs of tests recently made to illustrate the fire-resisting qualities of good tin plate. A copy will be sent to any tinner interested on request. Mr. Evans' paper was published in full in the convention report of THE AMERICAN ARTISAN in the issue of August 17th.

"G. B." GAS HEATERS.

The G. B. Gas Heater for soldering coppers, manufactured by the G. Bickelhaupt Skylight Works, 243-245 West 47th street, New York, is claimed to save both gas and labor. The construction of the burner is designed to prevent dirt getting into it and obstructing the flames. Both the flames meet against the coppers. The heater has a hinged movable top and movable copper rests. It is made of cast iron and can be easily regulated by an air mixer at the back. The price is low and the manufacturers claim that it is a very reliable and economical heater. When writing them for detailed information, kindly mention THE AMERICAN ARTISAN.

THANK YOU!

Adolph E. Dahm of Waupaca, Wisconsin, writes under date of August 12th: "THE AMERICAN ARTISAN is a great paper. I find much valuable and interesting information in it."

John T. Brown of Union City, Michigan, writes: "I have nothing but words of praise for THE AMERICAN ARTISAN. It is the best piece of literature that comes to my home."

E. E. Lewis of Mount Auburn, Iowa, writes: "Please stop advertisement marked D86 as I have had more offers than forty men could supply. I thank you for the same."

John D. Viers of Akron, Ohio, writes under date of August 15, 1907: "I think no tinner or hardware man can put $2.00 to any better use than in a subscription to THE AMERICAN ARTISAN."

PAINTING TIN ROOFS.

BY GEO. W. BATTLEY, OF NORFOLK, VA.

It is obvious from the standpoint of durability that it is best for the tinner and not the painter to paint the tin roof upon completion, and as soon as completed, not waiting until the tin is rusty, using the best mixture of linseed oil and metallic brown iron paint that can be obtained, applying thoroughly.

The roof painting is not considered seriously by the average painter who has a contract for painting the new house, and when he is ready to paint the roof, which is usually after the tin has gathered a good coat of rust, in order to make his paint stick better he takes the skins of all kinds left from the house job, adds enough brown to give it color, and he is ready to paint the roof. I know instances of paint of that character being blown off of the roof by a strong wind and strongly suspect the use of kerosene oil in place of linseed.

For this reason and the farther reason that it is profitable, the tinner should reach out for the business of roof painting. We should include the item of roof painting, top and bottom, in our estimates, and after a lapse of six months should follow up the matter with a letter patterned after the following:

"Dear Sir or Madam: Some time ago I put a new tin roof on house No. —— ——— street, and at the same time one coat of paint was applied. I don't know whether or not you have had the roof painted since that time. If you have not had it painted, allow me to suggest that it should be done. Paint is the life of tin, and a tin roof that is kept properly covered with a good roof paint will last for years, while one that is forgotten and neglected will soon wear out, however good the quality of the tin. The roof, being out of sight, is forgotten, and allowed to suffer for the want of paint, and the result is a leaky roof, which is often beyond repair, requir-

ing removal altogether in order to stop the leaks. In this connection, I desire to call your attention to a superior quality of paint which I am using, and, if you think that the roof mentioned requires painting, I will be glad to examine it for you and submit an estimate. No charge will be made for this service unless it is necessary to use ladders to get on the roof, in which case a charge is made for drayage only."

This letter I have recently used and found of profit.

[The above was read at the recent Annual Convention of the National Association of Master Sheet Metal Workers at Cleveland, Ohio.]

NOTES AND QUERIES.

RELIANCE STOVES.

From Daniel Haid, Jr., Berger, Mo.

Please inform me who manufactures Reliance Stoves.

Ans.—Belleville Stove Works, Belleville, Illinois.

OVERHEAD PULLEYS FOR METAL WINDOWS.

From T. P. Walsh, San Antonio, Texas.

Please give me the name of a manufacturer of overhead pulleys for metal windows.

Ans.—Gardner Sash Balance Company, First National Bank building, Chicago, Illinois.

FIRE ESCAPE FLEXIBLE LADDERS.

From Goedecke & Jones, Knapp, Wisconsin.

Please give us the names of firms making or handling fire escape flexible ladders.

Ans.—H. Adler Co., Carnegie, Pennsylvania; Chandelier & Art Brass Works, Richmond, Indiana.

CHARTER OAK STOVES.

From Daniel Haid, Jr., Berger, Mo.

Kindly inform me by whom Charter Oak Stoves are manufactured.

Ans.—Charter Oak Stove & Range Company of St. Louis, Missouri.

WATER MOTORS FOR WASHING MACHINES.

From E. J. Schlafly, Beach City, Ohio.

Please give me the address of a manufacturer of water motors for washing machines.

Ans.—Smith & Hemenway Co., 108-110 Duane street, New York City.

COAL CHUTES.

From Goedecke & Jones, Knapp, Wisconsin.

Can you give us the addresses of firms that make or handle coal chutes?

Ans.—Holland Furnace Co., Holland, Michigan; Chappell Furnace Co., Morenci, Michigan.

ITEMS.

The Washington Tin Plate Company, Pittsburgh, Pennsylvania, has been incorporated with $10,000 capital. Incorporators: Richard W. and Wallace Martin and John J. O'Connor, Pittsburgh.

The Royal Enameling and Stamping works has been incorporated to do business at Desplaines, Ill., capital, $150,000; incorporators, John D. York, Nathan D. Kaplan, Fred W. Kraft.

The S. Keighley Metal Ceiling & Manufacturing Company, of Pittsburgh, Pennsylvania, will furnish 40,000 square feet of Keighley skylighting for the new Callahan building, now under construction at Youngstown, Ohio.

The Bielenberg Sheet Metal and Roofing Company has been organized at Elgin, Illinois: capital, $10,000; to do a contracting, manufacturing and mercantile business. Incorporators: A. C. Joslyn, A. A. Bielenberg, R. D. Hollembeak.

The McVoy Sheet & Tin Plate Company, Chicago, have issued as the latest in their series of artistic post cards a very seasonable one entitled, "The Man at the Helm." It calls attention to the merits of McVoy's Old Method Roofing Tin.

The Tin Roofer's Handbook issued by the National Association of Master Sheet Metal Workers will be sent free postpaid on request of any roofer, contractor or builder. Address President Edwin L. Seabrook, 2213 Chestnut street, Philadelphia, or Secretary W. H. Barnard, Norfolk, Virginia.

The National Stamping and Enameling Company has declared the usual annual dividend of 7 per cent on its preferred stock, payable in four quarterly installments of 1¾ per cent each on September 30, December 31, March 31, 1908, and June 30, 1908. In order to pay the first installment the preferred stock books will close September 10 and reopen October 1.

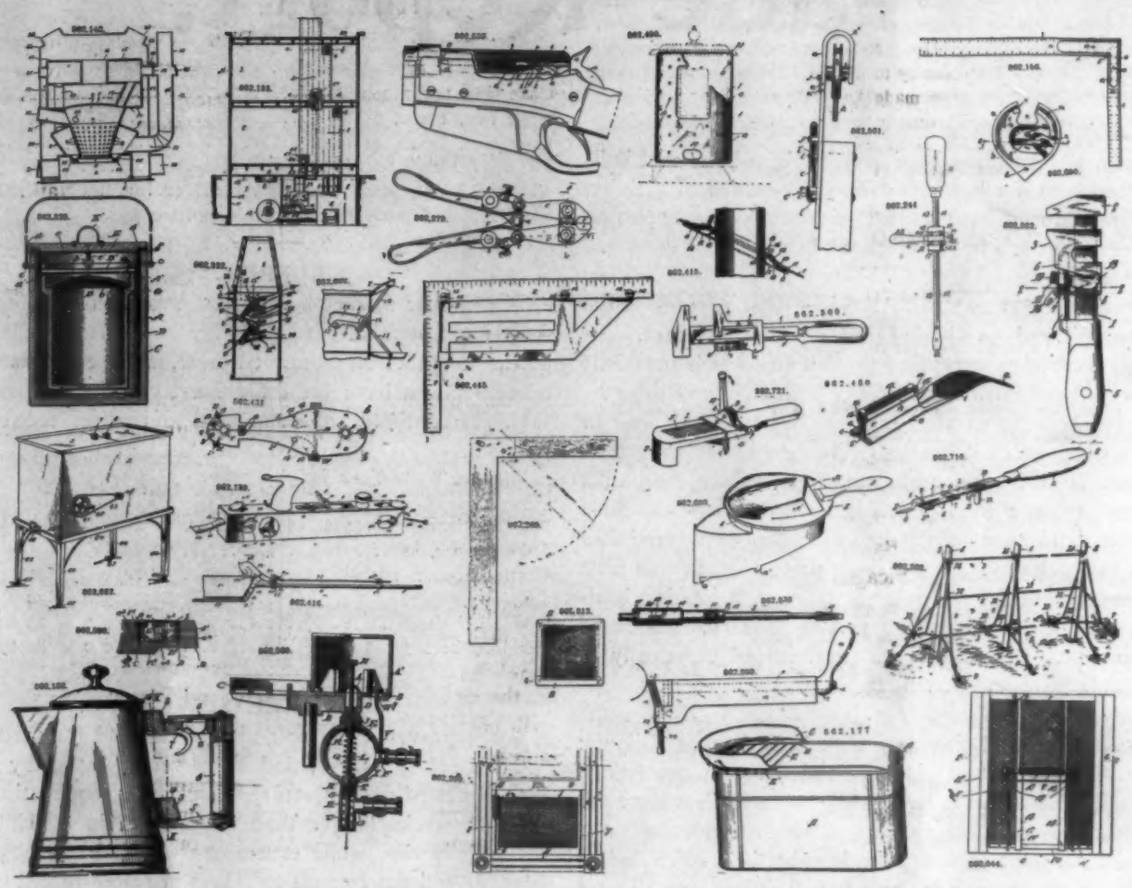
The Peoria, Illinois, Journal says: "Stuber & Kuck, tinware manufacturers, have been granted a permit for the erection of a splendid factory building to cost $35,000. The building will be five stories high, located on the corner of South Adams and Blaine streets. It will have 158-foot frontage on Adams and 149 on Blaine. The building will be plain and substantial, but its dimensions indicate its importance. The business of the firm has far outgrown its present quarters and it is planned to vastly increase its output and the number of employes."

The Memphis Can Manufacturing Company has been incorporated in Memphis, Tennessee, with a capital stock of $100,000, and will erect a plant to be in operation this fall, it is said, for the manufacture of all sorts of tin cans, with special reference to non-explosive oil and gasolene cans and tanks. The estimated cost of the building and machinery is $30,000. W. A. McClure of the Houston Can Manufacturing Company, Houston, Texas, is to be secretary and general manager.

The city of Buffalo, New York, will have an "Old Home Week" celebration September 1st to 7th, and among the wholesale firms and manufacturers who will help make the week pleasant for former Buffalo people is The Republic Metalware Company. A reminder of the occasion has been issued in the form of an attractive folder which promises that The Republic Metalware Company and other large concerns will prepare special displays of their goods and products and will offer special inducements to buyers.

The McKinley National Memorial is to be dedicated at Canton, Ohio, September 30th, and the Berger Manufacturing Company of that city, the well-known sheet metal manufacturers, are making preparations to entertain their friends and customers who visit the city to attend the dedication. A fine photographic reproduction of the monument is being sent out by the company on a post card bearing the terse invitation: "Big Day September 30th. Theodore and Others. Berger Manufacturing Company, Canton, Ohio."

NEW PATENTS.



862,132—Cooking Utensil. James Buckley, Pittsburg, Pa. Filed Feb. 19, 1907. Serial No. 358,192.

862,139—Combination-Tool for Carpenter's Use. Jay M. Darrow, Asherville, Kans. Filed Mar. 23, 1907. Serial No. 364,076.

862,142—Heating-Furnace. Nelson W. Dimpsey, Portage, Wis., assignor of one-half to Lewis C. Hammer, Detroit, Mich. Filed Oct. 12, 1906. Serial No. 338,535.

862,158—Heating System. John Hedlund and William W. McMahon, Kansas City, Mo. Filed June 5, 1906. Serial No. 320,274.

862,166—Carpenter's Square. Einar O. Iversen, Chicago, Ill. Filed Dec. 28, 1906. Serial No. 349,849.

862,177—Washboiler-Drainer. May L. Mace, Portland, Oreg. Filed May 16, 1907. Serial No. 373,940.

862,200—Window-Screen. Byrd C. Rockwell, Malvern, Ark. Filed Aug. 11, 1906. Serial No. 330,207.

862,244—Screw-Driver. Matthew Garratt, Passaic, N. J. Filed Nov. 6, 1906. Serial No. 342,193.

862,262—Fence. Joseph L. Mackey, Blountville, Tenn. Filed Feb. 21, 1907. Serial No. 358,675.

862,269—Folding Square. Samuel J. Mullin, San Francisco, Cal. Filed Nov. 24, 1906. Serial No. 344,995.

802,279—Bolt-Clipper. Henry K. Porter, Chelsea, Mass. Filed Dec. 19, 1906. Serial No. 348,540.

862,325—Portable Self-Cooking Camp-Stove. Lorenzo G. Fagersten, Chicago, Ill. Filed Nov. 13, 1906. Serial No. 343,221.

862,332—Wrench. Charles S. Hemenway, Covelo, Cal. Filed Apr. 9, 1907. Serial No. 367,136.

862,382—Heater. Ira H. Black, Carnegie, Pa. Filed July 16, 1906. Serial No. 326,452.

862,415—Stovepipe. Ira A. Rohrer, Boise, Idaho, assignor of one-half to David B. Camp, Boise, Idaho. Filed Jan. 14, 1907. Serial No. 352,245.

862,416—Pan-Lifter. Carl F. Skoog, Chicago, Ill. Filed Mar. 18, 1907. Serial No. 362,917.

862,431—Roller-Skate. Abraham Armband, New York, N. Y. Filed Jan. 8, 1907. Serial No. 351,305.

862,560—Gas Heater or Stove. William Howell, Philadelphia, Pa., assignor of one-fourth to Frank R. Howell and one-fourth to Clarence W. Howell, Philadelphia, Pa. Filed Mar. 8, 1906. Serial No. 304,912.

862,445—Attachment for Carpenters' Squares. Storm A. Burgett, Aurora, Ill. Filed Feb. 20, 1907. Serial No. 358,341.

862,480—Safety-Razor. William S. Hopkins, Waltham, Mass. Filed Apr. 19, 1907. Serial No. 369,052.

862,490—Stove-Jacket. George M. Lord, Meeker, Colo. Filed Aug. 16, 1906. Serial No. 330,929.

862,509—Monkey-Wrench. Solomon V. Rehart, Glendale, Cal. Filed Feb. 26, 1907. Serial No. 359,431.

862,539—Firing-Pin Lock for Firearms. Frank F. Burton, New Haven, Conn., assignor to Winchester Repeating Arms Co., New Haven, Conn., a corporation. Filed May 3, 1907. Serial No. 371,619.

862,550—Hinge. George C. Gardner, Chicago, Ill. Filed Apr. 10, 1905. Serial No. 254,682.

862,561—Rolling-Door Hanger. Milton E. Hunt, Waterville, Me. Filed July 17, 1905. Serial No. 270,284.

862,602—Stove-Door. Berry A. Baxter, Mansfield, Ohio. Filed Apr. 4, 1907. Serial No. 366,250.

862,644—Screen. Francis M. Kepler, Hanna City, Ill. Filed Aug. 3, 1906. Serial No. 329,059.

862,662—Dish-Washing Machine. Elizabeth J. Robinson, Arleta, Oreg. Filed Dec. 31, 1906. Serial No. 350,191.

862,690—Padlock. Maurice Ackerman, Washington, D. C. Filed Feb. 20, 1907. Serial No. 358,371.

862,693—Flat-Iron Heater. John Anderson, Oakland, Cal. Filed Apr. 21, 1906. Serial No. 313,091.

862,710—Can-Opener. James Condville, Bella Bella, British Columbia, Canada. Filed Aug. 21, 1906. Serial No. 331,495.

862,721—Wrench. Walter F. Dinsmore, Quincy, Mass. Filed Oct. 6, 1906. Serial No. 337,747.

862,809—Tool-Holder. George W. Conklin, Shelton, Conn. Filed Mar. 14, 1906. Serial No. 305,982.

862,813—Metal-Frame Window-Screen. Albert A. Day, New York, N. Y. Filed Aug. 22, 1906. Serial No. 331,645.

862,838—Bit Holder and Extender. Edward T. Murray, Colorado Springs, Colo. Filed Feb. 17, 1905. Serial No. 246,172.

Trade Report.

HARDWARE.

A quiet tone continues to prevail in the hardware trade, but business is of seasonable volume and indications are not lacking of an early return of activity. Manufacturers have had an opportunity to catch up on orders, but are busily engaged in nearly all lines and prices are firmly held. Jobbers are said to be holding off to some extent, with the idea that present prices are high and may be lowered in the near future. An optimistic view regarding the fall business is prevalent everywhere and the outlook is extremely promising.

The scarcity of steel is again becoming a factor in the wire and nail situation. While deliveries are better, there is still some room for improvement, but mills have a large tonnage of unfilled business on their books, and have been forced to make heavy purchases of raw material. In cut nails, there is still some little trouble with deliveries from mills, with jobbing business of about normal proportions for this season of the year. Business in wire is confined principally to withdrawals on outstanding contracts, with new business light.

Chicago quotations on wire nails are as follows: $2.18 in car lots to jobbers and $2.23 in car lots to retailers, with an advance of 5 cents for less than car lots from mills.

In cut nails jobbers who bought their stock before the recent advance are able to sell at less than regular quotations, but the advance is being generally maintained by the mills. The demand for both barb and smooth fence wire is very strong and mills are taxed to their fullest capacity.

The price of sheet zinc has again been reduced and the base is now $7.75.

Manufacturers of bolts, nuts, etc., held their monthly conference in New York this week, and it is understood that present prices have been confirmed.

TIN PLATE.

New business in tin plate is of normal proportions for this season of the year. The decline in the price of pig tin has had no effect on the market, owing to the fact that the percentage of the metal used in the making of the plate is so small that the present decline has not been sufficient to warrant a revision of prices. Present quotations are firmly held at $4.09 for 100-lb. coke plates f. o. b. New York and $3.90 f. o. b. Pittsburgh. Price f. o. b. Swansea for tin plates is 14s 10½d.

American coke tins, I. C., from store, New York:

Bessemer steel, 107 lbs, 14x20	$4.55@4.60
Bessemer steel, 100 lbs, 14x20	4.40@4.45
Bessemer steel, 95 lbs, 14x20	4.30@4.35
Bessemer steel, 90 lbs, 14x20	4.20@4.25
Am. charcoal ternes, 8-lb coating—	
Worcester grades, 14x20, 107 lbs	4.50@4.55
Worcester grades, 14x20, 100 lbs	4.35@4.40
Worcester grades, 20x28, 200 lbs	8.25@8.30
For prompt shipment f. o. b. mill—	
Coke tins, 14x20, I. C.	4.05@4.10
Coke tins, 14x20, 100 lbs	3.90@3.95
Coke tins, 14x20, 95 lbs	3.85@3.90
Coke tins, 14x20, 90 lbs	3.80@3.85
Charcoal, terne, 20x28, I. C.	7.50@7.55
Charcoal terne, 20x28, 200 lbs	7.20@7.25

Usual differences for odd sizes and weights.

COPPER.

The copper market is dull and weak. The indications are favorable for the larger buyers and sellers getting together on an agreed price, and the efforts to depress prices have for the present run their course. Business continues at a standstill and prices entirely nominal.

Extreme fluctuations for this year:

	Highest.	Lowest.
Electrolytic copper, spot	25½	17¾
Lake copper, spot	25¾	18¾
Casting copper, spot	24⅞	17¼
London, spot	£110 15 0	£76 10 0
London, futures	112 0 0	73 10 0
London, best selected	118 0 0	84 10 0

SHEETS.

An improvement is noted in the demand for sheets. Mills are still far behind in deliveries, especially of blue annealed and galvanized stock, and require three or four weeks longer than the normal in which to make deliveries, while consumers who have specifications in will not consent to delays in shipment.

The following prices are for 500-bundle lots and over, f. o. b. mill:

	Black.	—Galvanized.—	
Gauge.	Net.	Net.	List.
No. 30	$2.85	4.25	21
No. 29	2.75	4.00	19
No. 28	2.60	3.75	17
No. 27	2.50	3.55	16
Nos. 25 to 26	2.45	3.35	15
Nos. 22 to 24	2.40	3.15	14

SHEET ZINC.

Demand for sheet zinc has slackened up somewhat and prices have again been reduced to a new base price of $7.75 per 100 pounds f. o. b. smelter, with 8 per cent discount. There is no charge for extras. Prices on cask lots are held at $7.80@7.90 per 100 pounds.

MERCHANT BARS.

Business in iron bars continues of small proportions, with trading of a more or less routine character. Prices are still firmly maintained on the old basis of $1.76@1.81 at tidewater. The Pittsburgh market is still quiet, with some reports of shading on firm offers. Prices are unchanged at $1.70@1.75.

There is a fair demand for steel bars at unchanged prices.

PIG IRON.

The feature of the pig iron market is the weakness in basic iron. Some large lots have been offered in

the Eastern markets at much lower prices than have been quoted for some time. Quotations generally are somewhat irregular and there is a feeling of uncertainty as to the probable course of the market. Southern iron is quoted at $19.00 to $19.50, Birmingham, for No. 2 Foundry spot, but present quotations are nominal and there is a feeling that the appearance of heavy buyers in the market would result in lowering prices.

CHICAGO MARKET.

Lake Superior Charcoal	$27.00@27.25
Northern Foundry No. 1	25.00@25.50
Northern Foundry No. 2	24.50@25.00
Northern Foundry No. 3	24.00@24.50
Southern Foundry No. 1	23.85@24.35
Southern Foundry No. 2	23.35@23.85
Southern Foundry No. 3	22.85@23.35
Southern Foundry No. 4	22.35@22.85
Southern No. 1 Soft	23.85@24.35
Southern No. 2 Soft	23.35@23.85
Southern Gray Forge	21.85@22.35
Southern Mottled	21.35@21.85

BIRMINGHAM MARKET.

No. 1 foundry	$20.50@21.00
No. 1 Soft	20.50@21.00
No. 2 foundry, spot	19.50@20.00
No. 2 foundry, last half	19.00@19.50
No. 2 Foundry, 1st quarter of 1908	18.00@18.50
No. 2 soft	19.50@20.00
Gray forge	17.50@18.00

PITTSBURG MARKET.

Prompt delivery (small lots.)

No. 2 Northern	$23.40
Gray Forge	21.90
Bessemer	23.40
Basic	21.90

Second Half.

Bessemer	$22.90
Basic	21.90
Foundry	22.90 to 23.40
Gray Forge	21.90
No. 2 Southern	23.85

Rogers, Brown & Co., Cincinnati, will say in their weekly report:

"The week has seen quite a fair line of orders and in some grades these have been of good size. Malleable and special irons unquestionably have the call and a good tonnage has been closed. Spot iron in the foundry grades is moving slowly and there is little, if any, increase in interest for the fourth quarter of this year, with business quiet and no inquiry for 1908.

"Locally, each inquiry is being considered and treated strictly by itself and quotations are governed by the particular condition of furnace order books. Makers are not forcing their product in any way.

"The ups and downs of the stock market and financial affairs generally during the past week or ten days have been followed very closely by those interested in the iron trade, but as these conditions in Wall Street do not in any way reflect the character and conditions of the iron industry, they do not carry the weight with the pig iron maker and buyer that they otherwise might.

"It is confidently believed that with the slight tonnage unsold and available for shipment during 1907 it would take very small activity on the part of buyers to cast a decided change over the character of the market, particularly for this year.

Matthew Addy & Company, Cincinnati, will say in their weekly report:

"A review of the pig iron market during the week just ended is most easily expressed in the time-honored "quiet, but firm." Inquiry is very light, but there is little, if any, change in prices. A general state of apathy exists, and the producer does not seem any more anxious to sell than the consumer to buy. It is again the old waiting game, and until one or the other finds it necessary to come down off the fence and show some interest things will probably continue to remain in the present state. Melters are only buying what iron they actually need, and furnacemen generally claim to be independent with order books in good shape—and so it goes. On either side of the fence, however, the utmost activity prevails. On one hand, furnaces—handicapped by labor shortage—are striving to bring production up to capacity, and although agents are scouring the country for laborers they are not meeting with any signal success. New mines are being opened up whenever it is possible, and nothing that would help increase the output is being left undone when labor can be obtained. On the other hand are the mills and foundries. Everywhere they are busy, many of them are behindhand on orders, and all of them are urging deliveries of pig iron on their contracts.

"Some little speculative iron and resale lots have been offered at prices somewhat under the ruling quotations, but it is not thought that there is enough of this to be of any serious consequence. The thing seems to have resolved itself into the question of who will weaken first, but with manufacturers as busy as they are, with orders behind and production sold ahead, we cannot see how it is possible for there to be any serious weakening in the market.

"The labor shortage has played havoc with the production of coke, especially in the West Virginia fields where the amount being turned out is startlingly small.

"Coke prices remain unchanged."

CHICAGO OLD METAL MARKET.

Heavy copper	$15.00@16.00
Copper wire	15.00@16.00
Light copper and bottoms	14.00
Heavy composition	14.50
Heavy yellow brass	10.50
Light brass	8.50
Yellow borings	9.00
Red borings	12.00
Zinc	4.00
Block tin pipe	33.00
Tea lead	3.75
Good mixed pewter	25.00
Clean car brasses	13.00
Stereotype metal	5.00
Electrotype metal	4.25

TIN MINING IN CORNWALL.

Consul Joseph G. Stephens, of Plymouth, writes as follows on renewed mining activity in that part of England:

"Cornish tin mining points to a revival. As long as the Americans delay developing the rich deposits in South Dakota and in the Southern states so long will the Cornish mines profit through the lack of rivalry. There is no doubt that an enormous quantity of tin still remains to be extracted from the Cornish hills. Many old mines, which ceased working when the bad times came some thirty years ago, were closed not because they had not an abundant deposit of tin ore but because the market was flooded with foreign tin, which was then being produced at a price with which the deep and costly Cornish workings could not compete. This foreign supply has now greatly diminished, and the world again turns for its supply to Cornwall. Old mines are being reopened and new claims started. It is firmly believed by reliable judges that Cornish mining has a great future before it, and that the district is entering upon an era of profitable enterprise."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x20	$7 50
IX	14x20	8 25
IXX	14x20	9 40
IXXX	14x20	10 65
IXXXX	14x20	11 80
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 00
IXXX	20x28	21 25
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	8 50
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes 270 lbs	IX	20x28	11 25

PIG IRON.

Lake Sup. Charcoal	$26 00@$26 50
North'n Fdy., No. 1	26 00@ 26 50
North'n Fdy., No. 2	25 50@ 26 00
North'n Fdy., No. 3	25 00@ 25 50
Northern Scotch Fdy.	26 00@ 26 50
Ohio Strong Softeners, No. 1	26 50
Ohio Strong Softeners, No. 2	25 50
Southern Fdy., No. 1	23 40@ 25 40
Southern Fdy., No. 2	22 90@ 24 90
Southern Fdy., No. 3	22 40@ 24 40
Southern Fdy., No. 4	21 90@ 23 90
Southern No. 1 Soft	23 40@ 25 40
Southern No. 2 Soft	22 90@ 24 90
Southern Gray Forge	21 40@ 23 40
Southern Mottled	20 90@ 22 90
Southern Silveries, 4 to 6 per cent Silicon	27 40@ 29 90
Jackson Co. Silveries, 8 to 10% Silicon	31 40@ 33 40
Ala. and Geo. Car Wheel	25 40@ 25 90
Malleable Bessemer	25 50@ 26 00
Standard Bessemer	25 50@ 26 50
Basic, Pittsburg	23 25

BLACK STEEL SHEETS.

Nos. 11-13	per 100 lbs $2 60
Nos. 14-16	per 100 lbs 2 65
Nos. 17-18	per 100 lbs. 2 70
Nos. 17-21	per 100 lbs. 2 75
Nos. 22-24	per 100 lbs. 2 80
Nos. 25-26	per 100 lbs. 2 85
No. 27	per 100 lbs. 2 90
No. 28	per 100 lbs. 3 00

GALVANIZED.

Nos. 10-11	per 100 lbs. $3 15
Nos. 12-14	per 100 lbs. 3 25
Nos. 15-16	per 100 lbs. 3 35
Nos. 17-21	per 100 lbs. 3 50
Nos. 22-24	per 100 lbs. 3 65
Nos. 25-26	per 100 lbs. 3 85
No. 27	per 100 lbs. 4 05
No. 28	per 100 lbs. 4 25

POLISHED SHEET STEEL.

No. 24	per 100 lbs. $4 90
No. 26	per 100 lbs. 5 00
No. 27	per 100 lbs. 510
No. 28	per 100 lbs. 520

SMOOTH STEEL.

Wood's Smooth,	No. 20	$2 05
" "	No. 22-24	2 10
" "	No. 25-26	2 15
" "	No. 27	2 20
" "	No. 28	2 20

PATENT PLANISHED SHEET IRON

Patent Planished Sheet Iron. "A" $10 20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel....8½c

SOLDER.

XXX Guaranteed ½ & ½	per lb. 26½c
Commercial ½ & ½	per lb. 26 c
No. 1 Plumbers	24½c

SHEET ZINC.

600 lb. Cooks	cases, per cwt. $ 50
400 lb. Cooks	per cwt. 9 50
Sheets	per cwt. 10 50

COPPER.

Copper, sheet, 100 lbs. over, base, 28c

TIN PIGS AND BARS.

Banca, pigs, per lb	44c
Straits, pigs, per lb	44½c
Straits in bars, per lb	47c

LEAD.

American Pig	6¾
Bar	7½c
National (White) brands (in less than 100 lb. lots), per lb	8½c

Sheet.

Full coils	per 100 lbs. $9 00
Cut coils	per 100 lbs. 9 50

HARDWARE.

ADZES.

Carpenters'.

Plumbs	40%

Coopers'.

Barton's	20%
White's	15%

Railroad.

Plumbs	40%

Ship.

Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L. Waterproof, 1-10s	40c
G. D.	35c
Musket	60c

Cartridges.

Winchester Rim Fire Ctgs	50&22%
Winchester Cent Fire, Pistol and Rifle	25&8%
Winchester Cent Fire, Military and Sporting Ctgs	15&8%
Winchester Blank Ctgs. 22 cal.	$1 25
Winchester Blank Ctgs. 32 cal., C. F.	4 60
Winchester BB Caps, Rnd. ball	1 50
Winchester BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&2%

Primers.

Berdan Primers	$1 00
Winchester Primers	30%

Shells.

New Rival Empty Paper Shells, 10 and 12 gauge	25%
New Rival Empty Paper Shells, 16 gauge	20%
Repeater Empty	30%
Leader Smokeless	25%
Winchester Repeater Loaded Shells	40&5%
Winchester Leader	40-10&10%
New Rival Loaded Shells	33⅓ & 11%

Gun Wads—per 1,000.

Winchester Gun Wads	15%

Powder.

		Each
DuPont's Sporting, kegs		$ [illegible]
" "	½ kegs	3 50
" "	¼ kegs	1 40
Dupont's Sm'k'less.	50-lb. drum	23 45
" "	25-lb. kegs	11 3
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
" "	1-lb. cans	15

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25 lb. bags, "	2 20

ANCHORS.

Expansion Screw Anchors	10%

ANVILS.

Trenton, 70 to 80 lbs.	9½c per lb
Trenton, 81 to 150 lbs.	9½c per lb

ASBESTOS.

Board and Paper	35%

AUGERS.

Boring Machine	70%
Irwin's	40&10%
Carpenters' Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3	36 00
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 25
Bafling.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-12½%
Snell's, " " "	40-5%

AWLS.

Brad.	
No. 3 Handled per doz.	$0 40
No. 1050 Handled "	80
Shouldered, assorted, 1 to 4, per gro.	1 20
Patent asst'd, 1 to 4 "	85
Harness.	
Common	85
Patent "	90
Peg.	
Shouldered per gro.	$1 20
Patent "	60
Scratch.	
No. 1, handled "	4 80
No. 15, socket handled. per doz.	1 25
No. 7 Stanley "	1 90
Sewing.	
Common per gro.	90
Patent "	90

AXES.

Boy's Handled.	
Lippincott, 3 lb per doz.	$6 00
Falls City "	6 00
Broad.	
Plumbs, West, Pat	33⅓%
" Can. Pat	40%
" Firemen's (handled), per doz	$18 75
Plumbs, Miners (handled) "	6 75
Single Bitted (handled).	
Gladiator 3 to 4 lbs., pr dz.	$11 00
Flint Edge " " "	9 25
Standard " " "	9 25
Elec. Chopper, Forest Clipper	10 50
Perfect Premier " "	10 00
Crown " " "	7 00
Single Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	$5 50
Flint Edge " "	7 00
Standard " "	7 00
Electric Chopper " "	8 25
Perfect "	7 75
Crown " "	6 25
Double Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	$11 50
Flint Edge " "	9 75
Perfect " "	11 00

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	30%

BARS, CROW.

Pinch or Wedge Point cwt.	$3 75

BASKETS.

Clothes.		
Small Willow per doz.	$6 75	
Medium " "	8 25	
Large " "	9 00	
Galvanized Iron.	½ bu.	1 bu. 1½ bu
Per doz.	$4 75	6 50 8 00

BEATERS.

Carpet.	Per doz.
No. 10 Coppered Spring Wire	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	1 10
Egg.	Per doz
No. 50 Imp. Dover	$0 75
No. 102 " " tinned	85
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	2 30
No. 15 " " "	3 00
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8 inch per doz.	$8 50
10 inch "	10 50
Moulders'.	
12 inch "	12 50

BELLS.

Call.	
3 in. Nickeled Rotary Bell, bronzed base per doz.	$5 00
Cow.	
High Grade	60%
Kentucky	70%
Door.	Per doz.
New Departure Automatic	$4 00
Rotary.	
3 in. Old Copper Bell	4 00
3 in. Old Copper Bell, fancy	6 00
3 in. Nickeled Steel Bell	4 50
3½ in. Nickeled Steel Bell	5 00
Hand.	
Hand Bells, polished	40&5%
White Metal	40%
Nickel Plated	30%
Swiss	40&22½%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50%
Farm, lbs. 40 50 75 100	
Each $1.35 1.60 2.35 2.85	

BEVELS, TEE.

Stanley's, rosewood handle, new list	35%
Stanley's iron handle	35%

BINDING, OILCLOTH.

Zinc	30%
Brass	70&10%
Brass Plated	75&5%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Triumph	50&5%
Ford's Ship	40&10%
Irwin	50%
Russell Jenning's	35&10%
Clark's Expansive	50%
Steer's " Small list, $30.00	35%
" Large " $36.00	35%
Irwin Car	45%
Ford's Ship Auger pattern Car	40&10%
Center	40&10%
Countersink.	
No. 18 Wheeler's per doz.	$1 25
No. 20 " "	1 75
American Snail head. "	75
" Rose " "	90
" Flat "	75
Mayhew's Flat "	1 25
" Snail "	1 25
Dowel.	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	60%
German Pattern per doz.	$0 60
German "	65
Gouge "	80
Spoon "	80
Countersink "	1 00
Beamer.	
Jenning's Square "	2 00
Standard Square "	75
German Octagon "	75
Screw Driver.	
No. 7 Common "	50
No. 1 Triumph "	1 25
No. 3 " "	1
No. 340 Shepardson's "	
No. 1 Smith's "	

BLACKING, STOVE. (See Pell sh

BLADES, SAW.

Butchers'.
Standard ⅞ & 1⅛ in. 40%
Clock Spring 40%
Star 15%
Coil ..... each $1 50
Hack.
Disston's ..... 35&5%
Flexible ..... 33⅓&5%
Star ..... 30&5%
Wood.
Jackson's ..... per doz. $2 25
Disston's—No. 6, 16, 26 & 045 .. 4 25
Triumph 3 50
Forest Clipper 3 0

BLOCKS.

Snatch.
Wooden ..... 60&10%
Steel 50%
Tackle.
Iron Strapped 70%
Com. Steel 60%

BOARDS.

Stove 40%
Wash.
Globe, single ..... per doz. $3 15
" double ..... " 3 65
Magnolia ..... " 3 85
Crystal Glass ..... " 4 35
Brass King ..... " 4 50
Nickel Plate ..... " 4 15
Enamel King ..... " 4 35

BOBS, PLUMB.

Carpenters'.
No. 2, iron ..... per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 2, lead ..... " 3 90
No. 4, " ..... " 3 40
No. 118, brass plated. " 1 10
No. N30, nickel plat'd " 1 30
No. N31, " " " 1 85

BOLTS

Carriage, Machine, Etc.
Carriage ⅜x6 and sizes smaller and shorter ..... 70&5%
Carriage, sizes larger and longer than ⅜x6 ..... 60%
Machine, ⅜x4 and sizes smaller and shorter ..... 70&10%
Machine, sizes larger and longer than ⅜x⅜x4 ..... 60&5%
Elevator ..... 50-10&5%
Plow ..... 60&10%
Stove ..... 80&10%
Tire ..... 75&5%
Wagon Box Strap 70%
Hortie Door.
Gem, iron 60%
" bronze plated 30%
Barrel.
Cast 60%
Wrought .....
" Bronzed 50%
Plush.
Wrought ..... 50&10%
Spring.
Wrought .....
" Heavy .....
Square.
Cast ..... 50&10%
Wrought .....

BORERS.

Angular.
Miller's Falls ..... per doz. $13 00
Bung.
Doz.
Enterprise Mfg. Co.'s No. 1 .... $14 00
" " " No. 2 ..... 18 50

BOXES.

Nail, No 1 2 10
Per doz $3.50 5.50 17.50
Miter.
New Langdon ..... 15&5%
Stanley's 30%
Seavey's ..... each $1 50

BRACES.

Barber's ..... 50&10&10@50&10&15%
Fray's Genuine Spofford's 60%
" Nos. 68 to 148 ..... 50%
" No. 0108 ..... $3 50
" No. 08 ..... 2 75
" No. 010 ..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 00
" No. 2 " 9 60
Shelf.
Cast Iron, Bronzed 50, 10, 5%
Griffin Wrought Steel 75%
" Folding 70%

BROILERS.

Wire 70%
No. Owren, Self-Basting, $9

BUCKETS.

Pump Rubber.
Wychoff ..... per gr. $4 75
Cooper ..... " 4 7
Champion ..... " 7 50
Victor ..... " 9 25
Star ..... " 5 00
IXL ..... " 6 75
Well.
Galv'd Qts 10 12 14
Per doz $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 4 00
" " swivel " 5 10

BUCKS, SAW.

Folding ..... per doz. $2 10

BURRS, RIVETING.

Copper Burrs only 15%
Tinners' Iron Burrs only 70%

BUTTS.

Cast Iron ..... 70&5%
Wrought Brass (New List) 20%
Wrought Steel Bright.
Wrought Steel, Japanned.
Nos. 731 an 70%

H'ERS.

Double ..... 65&5%
Inside and Outside ..... 65&5%
Wing 70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M $3 75
Toe.
Shoenberger ..... per ℔ 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes ..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons 20 30 40
Each $4.25 $5.00 $6.25
Milk.
Holstein.
Nos 200 201 202
Gals 5 8 10
Per doz $26.00 $27.00 $29.00
Chicago Pattern.
Nos 105 108 110
Per doz $20.00 $22.50 $24.00
Iowa Pattern.
Nos 408 410
Per doz $24.50 $25.50
New Elgin Pattern.
Nos 705 708 710
Per doz 27.00 $29.00 $30.50
Burn Pattern.
Nos 700 701
Gals 8 10
Price $2.40 $2.65

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular ..... each $3 50
Diamond, Sling ..... " 6 50
Myers' Imperial ..... " 3 50
" Clover Leaf ..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing ..... 50&10%
Bed ..... 60&5%
Common Plate.
Brass Wheel ..... 60&10%
Iron and porcelain wheels, new list ..... 60&5%
Philadelphia Plate, new list 70%
Martin's 60%
Payson's ..... 75&10%

CATCHERS, GRASS.

Carroll s No. C ..... per doz. $4.25
Wildermuth's
Nos 1 2 3
Per doz $5.60 $5.75 $6.25
Nos 4 5 6
Per doz $8.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleclack ..... doz. pairs $5 75
With Covert snaps. " 5 00
With slide ..... " 3 25
Without slide ..... " 3 85
Bright Ox Chains.
⅜ in. $7.25; ½ in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch ..... 5/16 ⅜ 7/16 ½
Per 100 lbs. $10.50 $9.00 $7.00 $6.30
Inch ..... 9/16 ⅝ ¾ ⅞
Per 100 lbs. $6.00 $5.90 $5.75 $5.65
Inch ..... ⅞ 1 1⅛
Per 100 lbs. $5.55 $5.55 $5.65
Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil
Cow Tie Chains.
American 2 toggle ..... 50&5%
" toggle and snap ... 50&5%
" open & closed ring, 50&5%
Halter Chains.
American, new list 33⅓%
German ..... 50&10&5%
Niagara, new list ..... 40&5
Brown's, " 40%
Picture Chains.
Light Brass, 3 ft ..... per doz. 55c
Heavy Brass, 6 ft ..... " 90c
Pump Chain.
Galvanized, per 100 lbs $5.50
Safety Chain.
Brass 60%
Special Steel Loading Chain.
Inch ..... ⅜ 7/16 ½
Per 100 lbs ... $16.00 $13.50 $12.50
Stretcher Chains.
5/16 in. $5.50; ⅜ in. $7.75 per 100 lbs.
Tie-Out Chains.
Brown's ..... 70&10%
Trace Chains.
Western Standard.
6½—6-2 ..... per pair 30c
6½—8-2 ..... " 34c
6½—8-3 ..... " 33c
6½—10-2 ..... " 38c
7 — 8-2 ..... " 38c
7 —10-2 ..... " 42c
7 —10-1 ..... " 48c
7 —10-0 ..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.
Wagon Stay Chains.
Inch ..... ⅜ 7/16 ½
Per 100 lbs ... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue ..... per gross 75c
Red ..... " 65c
White ..... " 55c
Common White Sch'l Crayon 8c

CHARCOAL

In bags ..... per bag 90c

CHECKS, DOOR.

Blount 33⅓%
Sargent's 33⅓%

CHIMNEY TOPS.

Iwan's Volcano 50%

CHISELS.

Box.
Inches 10 12 14
Round, per doz. $2.10 $2.35 $2.75
Flat " 2.85 3.60 4.20
Cold.
Good quality, ⅞ in. and larger ..... per ℔ 12c
Smaller size per doz.
Socket, Framing and Firmer.
Barton's 20%
Tanged, Firmer.
With handles ..... 30&5%
Choppers, See Cutters, Meat.

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers ..... per doz. $6 25
Yankee, for Yankee Screw Drivers 5 00

CHURNS.

Anti-Bent Wood, Gal .. 5 7 10
Each $2.90 $4.60 $4.85
Belle, Barrel 65-7½%
Common Dash, Gal .. 4 5 6
Per doz $7.75 $9.50 $10.50
Union, Gal 5 7 10
Each $3.65 $3.90 $4.75

CLAMPS

Adjustable.
Martin's 30%
Carpenters'
Steel Bar 35%
Hose.
Sherman's, brass, ¾ in., per doz .. 33c
Double, brass, ¾ in., " 65c
Saw Filers.
Disston's list, $30.00 ..... 30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 2, $5.00 doz.
Wentworth's. No. 1 $5.00; No. 3 $7.50

CLAWS, TACK.

Cast, wood hdle ..... per doz. 45@60c
Forged steel, wood hdle $0.80
Solid Steel ..... " 1.00
Giant ..... " .60

CLEANERS.

Drain.
Iwan's Adjustable 55%
Iwan's Stationary ..... 40&5%
Pot.
Wire ..... per doz. $0.85
Side-walk.
Steel ..... per doz. $2.25
XLCR ..... 65&5%

CLEAVERS.

Family.
Griffin, In 6 7 8
Per doz $5.50 $5.75 $6.25
Royal ..... per doz. 2 25
Butchers.
Beattys, Kitchen 40%

CLEVISES.

Malleable ..... 5½c ℔

CLIPPERS.

Bolt ..... $1.90@$4.75

CLIPS.

Axle ..... 65&5%
Damper.
Standard ..... per doz. 65c
Troy ..... " 38c
Hame ..... " 17c

Emery. CLOTH.

Star 50%
B. & A 50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $2
9 to 12 " " " 2
2 to 3 incl., Galv.—in full roll ... 3 75
4 and 5 ..... " 4 00
6 ..... " 4 25
7 and 8 ..... " 4 75
Screen Wire.
12 mesh, painted, per 100 sq. ft. 1.35

COCKS AND FAUCETS.

Compression Plain Bibbs 60%
Lever Bibb Cocks 60%
Compression Hose Bibbs. 50-10&5%
Telegraph Faucets (new list) ... 50-5%
Racking Cocks (new list) 60%
Compression Lock C'ks(n'w list) .. 70%
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz $0.85
Milk Can Faucets, per doz ... $2.60-4.20
Petroleum Faucets 75%

COLLARS, STOVE PIPE.

Inches 5 6 7
Plain Tin .... per gro. $1.90 $2.40 $2.80
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass " 3.00 3.50 4.25

COMBS, CURRY.

Nos 000 11 15 39 89 108
Per doz. $0.37 .60 1.90 .90 1.15 .80
Nos 299 320 390 532 620 1400
Per doz. $1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters' 60-10-10%
Pencil—Faber's ..... per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 ℔ ..... per ℔ 41c
1½ ℔ ..... 33c 2 ℔ .... " 39c
3 ℔ and larger ..... " 34c

CORD.

Picture.
White Wire (new list) 80-10-10%
Sash.
Baltic Braided Flax ..... per ℔
Silver Lake, white 7-32 in. "
" " " 8-32 in. "
Keystone ..... 8-32 in. " 28½c

CORKSCREWS.

Humason & Beckley 33⅓%
Walker's 33⅓%
Williamson's Regular ..... 40&10%
Williamson's Forged Worm 50%

COTTERS, SPRING.

All sizes—new list ..... 90&20%

COUPLINGS, HOSE.

Brass ..... per doz. $
Brass Plated ..... " .35

COVERS, WAGON—See Tents

CRADLES, GRAIN.

Morgan's Grapevine ... per doz.

CRAYONS—See Chalk.

CROW BARS.

inch or Wedge Point, per lbs. $3.25

CUTTERS.

Glass.
Red Devil 45%
Smith & Hemenway Co. 50%
Woodward 40%
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 35%
No. 202, list, $1.50 ea. ..... 40&7½%
Pipe.
Stanwoods ... No. 1 2 3
Each $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 85
2-knife " ..... " 2 25
Washer ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES AND STOCKS

Discount ..... 40&5%
King's, Little Giant 33⅓%

DIGGERS.

Post Hole.
Acme ..... per doz. $ 9 25
Atlas ..... " 9 00
Eureka ..... " 7 50
Hercules ..... " 10 25
Iwan's Split Handle .. " 7 50
Iwan's Perfection ..... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's ..... " 17 00
See also Augers—Post Hole.
Dividers, Wing ..... 65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $7 98
1⅛ in. " " " 9 50
1⅛ in. 3-panel natural pine, fancy ..... per doz. 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock ..... 60&10%
Blacksmith's Twist 60%
Breast.
Common ..... each, $2 25
Millers Falls ..... " 2 10
Hand
Goodell's Automatic.
Nos. 01 02 3 20
Per doz. .. $7.75 $12.50 $12.50 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's ..... per doz. $16 50
Bit Stock.
Standard List ... 60&5%@60%@10%

DRIVERS, SCREW.

Standard ..... 65&10%
Lock Ferrule 60%
Champion 60%
" Pattern 70%
Clark's Interchangeable 30%
Edison 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co. ..... 40&5%

EAVES TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern ..... 70&30%
Central ..... 75&10&2½%
Southern ..... 75&7½%
Western ..... 75&7½%
S. Western 75%
Terms, 2% for cash. Factory shipments generally delivered.
See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches 5 6 7
Smooth, per doz. $0.70 $0.75 $1.10
Plan'd " 1.80 2.00 2.65
Corrugated Conductor.
Discount 30%
Corrugated Stove.
Inches 5 6 7
Smooth, per doz. $0.70 $0.80 $1.30
Pol'd " 1.30 1.40 2.10
Plan'd " 2.00 2.20 3.00
Four-Piece Stove.
Inches 5 6 7
Smooth. per doz. 0.60 $0.65 $0.95
Planished " 1.40 1.70 2.2

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size ..... 5-lb. pkgs. ½ kegs, kegs
No. 60 to 150, per lb. 6c 4c 4c
Flour ..... " 5c 3c 3c

ENAMEL, IRON.

Nubian, ½-pt. cans ..... per doz. 1 65
Peerless 1 25

EXTRACTORS. PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W
Drifting Pick ..... 60, 10&5%
Hooks and—
Brass ..... 50&10%
Iron 70%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 85
Sensible 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta 70%
Disston's ..... 75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whisson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel, New List ..... 65&10%
Wood, 4 tines, per doz. $5.00
Coal, Coke, Cottonseed ..... 33⅓&5%
Hay.
2 tine ..... 60&10%
3 " 65%
4 " ..... 65&7½%
Digging 70%
Scoop 33⅓%
Header.
3 tine 65%
4 " 65%
Manure.
4 tine ..... 60&10%
Ore 40%
Spading.

FRAMES.

Hack Saw.
Union ..... per doz. $5 75
Jenning's adj. ..... " 7 50
Cast ..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts. 1 2 3 4 6
Each $1.10 1.30 1.50 1.80 2.30
Qts. 8 10 12 15
Each $2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform ... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power . " 42 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Cream Pail.
Fairmont ..... per doz. $3 75
Marking, Mortise, etc. .....
..... 50&10%
Saw.
Wire.
Disston's 25%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

Single ..... 90&10%
Double ..... 90&15%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber ..... per lb. 12 c
A White ..... " 15 c
H. S. Amber ..... " 16½c
Liquid.
Army & Navy 40%
Le Page's—
List "A" 37½%
List "B" 33⅓%
List "C" 25%

GOODS.

Bright Wire ..... 85&15%

GREASE, AXLE.

Wood Boxes.
Diamond ..... per gro. 5 50
Frazer's 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross 25 00
5 lb. per gross 37 00

GRIDDLES.

Soapstone 50%

GRINDSTONES.

Family.
Inches 7 8 9
Per doz. $3.25 9.00 10.50
Loose.
Per ton ..... $20 00@$21 00
Mounted.
Ball Bearing 1 2 3
Each $3.15 3.00 2.85
Common Bearing .. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common ..... per doz. $0 19
Peg.
Common ..... " 22
Patent, plain top .... " 47
" leather top ... " 53
Sewing.
Common ..... " 22
Patent ..... " 53

HALTERS.

Jute Rope ..... per doz. $1 10
Sisal Rope ..... " 1 85
Web ..... " 2 00
Leather, rope tie ..... " 8 50
" leather tie .... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs ..... 60&5%
Engineers'.
Plumbs ..... 60&5%
Farriers'.
Plumbs ..... 40&10%
Machinists'.
Plumbs ..... 60&5%
Nail.
Plumbs ..... 40&7½%
Quaker City ..... per doz. $3 50
Cast ..... " 1 15
Maydole's ..... 30&5%
Riveting.
Plumbs ..... 40&12½%
Shoe.
Cast ..... per doz. 75c
Tack.
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid ..... " 1 55
Magnetic 1 2 3
Per doz 70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs ..... 75&5%
5 lbs. and over ..... 75-10&5%
Masons'.
Single & Double Face ..... 75&5%

HANDLES.

Auger.
Common Assorted ... per doz. $0 36
Peck's Adjustable ... " 2 10
Ives' " .... per set 1 35
Axe 60%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
Coal Pick ..... 50&10%
Drifting Pick ..... 50&10%
File, assorted 13c large 16c per doz.
Hammer.
Adze Eye ..... per doz. 40c
Blacksmiths' ..... per doz. 40c@70c
Machinists' ..... " 45c@70c
Hatchet ..... per doz. 40c
Hay and Manure Fork 30%
Hoe and Rake 30%
Ice
Plain ..... per doz. 75c
Varnished ..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade 33⅓%

HANGERS.

Barn Door.
Nansen ..... 60&10%
Matchless ..... 70&10%
Storm King 60%
World's Best 50%
Wagner's Adjustable ..... 70&10%
Warehouse 60%
Conductor P
Griffin ..... 70&10%
Iwan's Perfection 50%
Eave Trough.
Baker's ..... per gro. $2 25
Imperial 30%
Wire 33⅓%
Parlor Door.
Acme ..... per set $3 75
Ives' Improved ..... " 2 80
Lane's Standard ..... " 3 20
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%

HASPS.

Hinge, Wrought 40
With Staples—See Staples.

HATCHETS.

Crown ..... 50-10&5%
Cast Claw ..... per doz. $1 20@1 65
Cast Shingling .... " $0 95@1 20
Germantown 40%
Plumbs ..... 33⅓&5%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1 .... per doz. $ 9 60
" No. 2 .... " 9 60

HINGES.

Blind.
Clark's Gravity ... per doz. sets 85c
Parker's 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 95
Gate.
Clark's 1 2 3
Hgs & Ltch .... doz. $2.50 3.00 4.80
Hinges only .... " 1.00 2.20
Latches only ... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American 30%
Chicago ..... 35&5%
Columbia Dbl. Acting .... 40&10&5%
Gem 35%
Ideal Detachable .... per gro. $11.10
Matchless 30%
New Idea ..... per gro. $6 00
Oxford 30%
Wrought Iron.
New Lists .....
Griffin
Light Strap Hinges 60%
Heavy Strap Hinges 65%
Light T Hinges 55%
Heavy T Hinges 45%
Extra Heavy T Hinges 60%
Screw Hook and Strap.
6 to 12 in ..... per 100 lbs. $3 75
14 to 20 in ..... " " 3 65
22 to 36 in ..... " " 3 40
Screw Hook and Eye.
½ in ..... per 100 lbs. $6 75
⅝ in ..... " " 7 75
¾ in ..... " " 9 75

HOES.

Garden ..... 70&10%
Grub.
Extra 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' 75%
Mortar ..... 75&10%
Planter's Eye 33⅓%
Weed ..... 75&15%

HOLLOW WARE—See Ware

HOOKS.

And Eyes.
Brass ..... 50&10%
Iron ..... 65&10%
Awning ..... per gro. $1 00
Belt.
Brown s ..... 70&5%
Jones' ..... 65&5%
Bench.
See Stops, Bench

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)

Bush.
Common Axe Handle, per doz. $7 00

Chain.
Inch... ¼&5/16 ⅜ 7/16 ½
Per 100 $7.00-8.10 9.75 11.50 13 60

Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c

Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....70%

Conductor.
Malleable.....50&10%@50&10&5%
Wrought .....40&10%@50%

Corn.
Common, unpolished, per doz. $1 35
" polished.... " 1 80
Cut Easy"..... " 2 75

Cut.
See Goods, Bright Wire.

Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75

Hammock.
With Plate.....per doz. 50c
With Screw..... " 45c

Lambreqnin, or Drapery, per gro. 21c
Picture .....50%@50&10%
Potato and Manure.....70&12½%

Screw.
Brass.....80&5%
(See Goods, Bright Wire.)

Seat Spring.....per lb. 5½c

HOOPS, TUB.

Elastic.....per case of 2 doz. $1.50

HOSE, GARDEN.

					Coupled per ft.
Heron-3ply-¾" guar. press.				55 lbs.	7½c
Crane	"	"	"	75 "	8½c
Falcon	"	"	"	95 "	9½c
Eagle	"	"	"	120 "	10½c
Condor	"	"	"	150 "	11½c
High Test	"	"	"	200 "	13½c

COTTON COV. RUBBER HOSE

High Grade-¾"-guar. press.				400 lbs.	11½c
Special	"	"	"	300 "	9½c
Leader	"	"	"	100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz..... $2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro..... $5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro..... $2.50 9.00 24.50
Nos..... 60 59 64 68
Per doz..... $2.15 2.15 .85 1.45

Brinkerhoff's.
Per gro.....$14 40

Clark's
Nos..... 1 63 200 400
Per doz.....$0.40 .75 .75 1.75
Nos..... 300e 40e 3e 4e
Per doz..... $0.85 .50 1.25 1.25
Nos.....A AB F
Per doz.....$3.50 $4.25 $3.50

IRON.

See Metals—First column.

IRONS.

Curling.
X.....per doz. $0 40
Y..... " 50
Z..... " 58
Jewel..... " 85
Imperial ..... " 1 00

Pinking ..... " 70

Plane.
Wood Bench..... ....20&5%

Sad.
Charcoal .....pt.. 4oz. $11 00
Common, Polished, per 60 lb. 4 50
" Nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 98
No. 55 J, " ... " 00
No. 50 T, " ... " 1 00
No. 55 T, " ... " 98
No. 50, Bless & Drake " 93
No. 55, " ..... " 99
Tailors' Sad.....per lb. 5½
" Geese ..... " 5½

Tuyere.
Single Duck Nest.....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

Locomotive..... 70%

Wagon.
Oliver
Nos 0 00
Each..... $.50 $0.80

Standard.
Nos..... 1
Each..... $0.60 1.00

Wilcox.
Nos..... 1 2 3
Each.....$0.85 1.30 2.00

KETTLES.

Brass.....15%

Cauldron .....40&5%

Copper.....per lb. 27c

Maslin 65%

Sugar 50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40

Cooper's Hoop.....15%

Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25

Drawing.
Standard 70%
Adjustable.....15%
Barton's Carpenters'.....10%
Folding Handle.....25&5%

Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 8 00
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point " 8 50

Hedge.
Challenge ....per doz. $6 00
Disston's..... " 2 75

Mincing.
Common, Single 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 20
" 6 Blade..... 2 00

Putty.
Common..... " 60@1 00
Lander's..... per doz. $1 40@1 75

Scraping.
Beech Handle.....75@1 00
Lander's.....$ 25@6 00

KNOBS.

Door.
Mineral .....per doz. $0 75
Porcelain ..... " 83
Jet..... " 83

LADDERS.

Common Long.
Per ft .....9c@14c

Extension.
Per ft 12c

Step.
Common, per ft.....6½c
" with Shelf, add 10c.
Keystone.... ....15c
Triumph, per ft 20c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz.$6 00
3½-in. Regular..... " 4 00
3-in. Regular..... " 5 00

Tubular.
Buhl.....net prices

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

Cut.....33⅓%

Glass.
Ex. Quality.....per sq. ft. 27c

LEATHERS, PUMP.

Valve and Plunger 10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
" Nickeled. " 5 00

Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos..... 4 6 7 8 9
Per gross $1 50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos 0 1 2 3
Per doz.....22c 25c 31c 35c
Masons in 100-ft. hanks..doz... 80c

Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. " ..... " 1 15
60-ft. Sisal ..... " 1 40
72-ft. " ..... " 2 15
50-ft. Cotton ..... " 1 15
50-ft. Braided Cotton. " 26

LINING, STOVE.

Fr. Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright.... "	2 60	4 00

Leather Riveting.
Chicago, Pomeroy....per doz. $9 00
Excelsior..... " 2 00
Handy ..... " 2 00
Little Giant..... " 3 00
Pony, Pomeroy..... " 7 20

Washing
Winner..... .....per doz. 54 00
Keystone ..... " 54 00
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 00
" Lignumvitæ .. " 3 00
Square Hickory..... " 2 00
" Lignumvitæ.. " 3 75

Tinners'.
Applewood ..... " 1 70
Hickory..... " 75@1 15
Hickory Sheet Iron.. " 1 20

MATS.

Door.
National Rigid.....80, 10&5%
Acme Steel Flexible.....33⅓%

Stove.
No. 2. .....per gross. $3.25
No. 1. ..... " 3.50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1.10
No. 2 Asbestos Toasters, with ring.....per doz. .60

MATTOCKS.

Plumbs.....65&10%
Extra 60%

MAULS.

Iron. lbs.	10	12	16	1
Per doz.	$4.00	4.50	5.25	5.60
Wood face, lbs.	10	12	14	
Per doz	$5.00	5.50	6.00	

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu
Galvanized, per dz.	$2.25	$2.60	$3.85
Japanned... "	1.75	2.45	3.15

MICA.

First Quality.....15%
Second Quality.....30%

MILLS, COFFEE.

Enterprise 35%
Parker.....40 12½&2½%
Arcade .....40-12½&2½%

MITRE BOXES.

See boxes.

MOPS.

Bris.....per doz. $3 15

Handled Cotton.
Pounds..... ¾ 1 1½ 2
Per dozen...$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Ball-Bearing.
Inches..... 14 16 18 20
Each $6.25 6.75 7.25 8.00

Cheap Grades.
Inches..... 12 14 16 18
Each $2.25 2.25 2.75 3.50

Clipper .....50, 10&10%

Yale.
Inches..... 4 16 18 20
Each.....$3.50 3.75 4.00 4.35

Philadelphia.
All Styles Except A & E 60, 10&10%
Style A.....50&10%
Style E, High Wheel.....60,10&10%
Drexels.....40%
All Day.....Net Pric

NAILS.

Cut Steel.....rates, $2 50
Cut Iron.....2 60

Wire.
Small Lots.....$2 35
Carload " 2 30
Cement Coated..... 2 25

Horse Shoe.
Ausable .....55&5%
Capewell 15%
Perfect.....55&5%
Putnam. 20-5%
Star.....25&5%
Clover Leaf..... per lb. net, 10½c

Picture.
Brass Heads.....25%

Brads.....25%

Furniture 20

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized before Weav'g....80&10%
" After Weaving ....80&5%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Ins. 5½ 6
Per dozen $4.00 $4.25

End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co...60%

Hoof.
Heller's .....40&10%
V. & B.....55-5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $2 90
Magic..... " 3 00
Mystic..... " 3 60

NUTS, HOT PRESSED.

Square Blank.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝
lb. 9½c 8c 6½c 5½c 5½c 5c 4½c

Square Tapped.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5 lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc..... ....60%

Engineers'
Cannon.....55%
Tin.....per doz. $2.00@$2.25

Machine.
Common .....per doz. $0 50
Copper Plated Steel.. " 85
Malleable Iron.....60, 10&5%
Jappanned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat...per doz $2.85 3.60 4.15
Round " 2.10 2.35 2.75

Can.
Delmonico.....per doz. $1 20
Never Slip..... " 0 85

rate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. $11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought .....70&5%
Champion 50%
Eureka.....40, 10&5%
Yale .....60&5%

PAILS.

Cream.
14-qt., without Ga....per doz. $2 50
20-qt., " " .... " 3 00
20-qt., with Gauge.... " 3 87

Sap.
10-qt., Galvanized..per 100.. $13 00
12-qt. " " .. 14 50
14-qt. " " .. 16 25
16-qt. " " .. 17 75
10-qt., IC Tin..... " .. 10 25
12-qt " " .. 11 75
14-qt. " " .. 13 00
10-qt., IX Tin..... " .. 12 75
12-qt. " " .. 16 00
14-qt. " " .. 17 00

Stock
Galvd. qts. 14 16 18 20
Per doz.....$2.75 4.00 4.75 5.25

Water.
Galvanized, qts 10 12 14
Per doz $1.95 2.20 2.45

Wood.
Cable, 2-Hoop.....per doz. $1 70
" 3-Hoop..... " 1 90
Cedar, 2-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 60
" 3-Hoop..... " 1 80

PANS.

Dripping.....60&5%

Fry.
Common.....75&10%
Acme 70%

Roasting.
Paxton.
Nos..... 1 2 3 4
Per doz.. $4.75 $5.75 $6.50 $7.50
Neverburn.. 4.00 4.50 5.50 6.
Savory No. 200 .....per doz 2.

PAPER.

Building.
Plain .....per 100 lbs. $1 25
Tarred..... " 1 25
Tarred Felt..... " 1 65
No. 20, Red Rosin.....pr roll 40
No. 30, Red Rosin ..... " 35

Sand and Emery.
Star.....low list..50%
B. & A.....50%

Wrapping
Drab Floor.....per
Rag.....

PARERS

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 00
White Mountain .... " 4 75
Reading..... " 6 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore 70%
Drifting and Poll Picks..... 70%
Plumbs Railroad 70%
Surface..... 70%

PINCERS.

Carpenters', cast steel.
In..... 6 8 10 12
Per doz...$1 80 $2 40 $2 80 $3 50
Blacksmith's 45%
Heller's 40%

PINS.

Clothes.
Common.....per box of 5 gro. $0 52
Hoyt's..... " " 31
U. S..... " " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral 1 90

PIPE.

Conductor.
Territory.
Eastern..... 70%
Central..... 65&10%
Southern..... 65%
Western..... 65%
Southwestern..... 50-35&3½%

Lead.
Full coils.....per ℔. 7½c
Cut " ..... " 7½c

Stove.
Acme—In. 5 6 7
Smooth, per jt.. 8½c 9½c 10½c
Planished " .. 32 c 33 c 43c
Peerless—Smooth 7½c 8 c 9½c
Polished 14½c 15½c 18c
Plan'hed 28 c 31 c 35½c
Made-up—In. 5 6 7
Smooth 7½c 8c 9½c
7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
Blue Steel.	Cents			
Battle Axe Blue	7	7½	9½	10½
Can't Slip "	7½	8½	10	11
Peerless "	7½	8½	10	11
Duplex "	10	11	13	14
Yale Rus. Fin.	15	16	17	18
DuplexPlan'h'd	29	31	37	38
Galvano, Gal.	15	16	17	18

If wanted made up, add per joint for grooved, 1c; riveted, 1½c. Crating made-up pipe extra.

Wrought Iron Gas Pipe
⅛@¼-in., black.....discount, 60%
⅜@½-in. ..... " 60,10&5%
¾-in. to 6-in.. black... " 70%
7 " 12 " .. " 69½%
⅛ galvanized " 42%
¼ " " 50%
⅜ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Bargent Iron Bench..... 60%
Stanley Iron Bench..... 35&3%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Segment..... " .. 9 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00
Pingree..... " .. 2 25
Eureka ..... " .. 6 25

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In. 4½ 6 8 10
Per doz.....$2.75 $3.35 $4.15 $5.15

Button's Pattern.
In. 4½ 6 8 10
Per doz.....$2.35 $2.75 $3.25 $4.25

Cutting.
Bernard's..... 30%
Lodi..... 50%

End and Diagonal Cutting.
Swedish Side 70%
Utica Drop Forge & Tool Co....50%

Fencing.
Farmers' Choice....per doz ..$6 00
Russell's..... " .. 8 25

Flat and Round Nose.
Bernard's..... 30%
German 65%
Lodi..... 50%
Paragon..... 50%

Gas—In. 6 8 10 12
Per doz...$3.35 $3.00 $4.00 $5.0

Tinner's.
Hollow.... ....40%
Solid..... each..5½c

PLUMBS AND LEVELS.

Common.....60&10&10%
Cook's..... 40%
Davis' Iron..... 25%
Davis' Inclinometer..... 15%

POINTS.

Drive Well Points.....75&5%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'l " " .80
Nickel pl'td, coil hdl's.. " " .85

POKES—ANIMAL.

Cracker Jack, wr't steel, per doz.... .....$4.50

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.
Pts. 1-6 ½ ¼
Per doz.....$0.80 $1.10 $1.65
Pts 1 2 8
Per doz $3 75 $4.50 $7.50 $12.50
White Silk half pints, per doz.$3.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz.....$0.70 $1.35 $2.25 $3.00

George William Hoffman.
U. S. Metal Polish Paste, 2 oz. boxes, per doz., 50c; pr. gro..$4.55
½-lb. boxes, per doz..... 1.20
1-lb. boxes, per doz..... 2.25
U. S. Liquid, 8 oz. cans, per doz., $1.35; per gro.....12.00
Barkeepers' Friend Metal Polish, per doz., $1.75; per gro..18.00

Shoe.
M. D. C.....per doz. 35c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

Stove.
Black Eagle, 1 ℔ cans. pr gr..$15.00
Black Silk—
5 ℔. pail.....$0 70
Paste, 5 oz. cans....per doz. 75
Paste, ½ lb. cans.... " 1 05
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.... " 1 75
Blackene, 1 ℔ cans....pr gro. 13 00
Black Jack, ½ ℔ cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, ..$ 95
Square, 1½ qt..... " 1 10
Square, 2 qt..... " 1 25
3 qt. Reversible..... " 1 60

POTS, FIRE.

Berns.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem.....ea..$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Menis .....per doz. $1 85

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy.....each $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70

Nail.
Giant.....per doz..$10 50
Giant Pattern..... " .. 6 00
Jumbo ..... " .. 9 00
Glan Tackt..... " .. 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 75
Wood Wheel, 6 in.... " 1 75
Wood Wheel, 6 in., pass knot..... " 2 15
Hot House—Jap'd .....50&10%
Screw..... " 60%
Side ..... " .....50&10%
Sash.
Common.....per doz $0 20
" Sense, 2 in .. " 20
Empir Pattern. 2 in.. " 20
Ideal..... " 20
Steel ..... " 25

PUMPS

Pitcher Spout.
Nos. 1 2 3 4
Each $1.10 1.23 1.40 1.85
Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 25
Machine.....per ℔. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 ℔s. 2 35

RAIL.

Barn Door.
Matchless, 1 in..... 3c
Matchless, 1½ in..... 3½c
Storm King..... 4c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.20
Garden.
Steel.....70&10%
Steel, bow.....70&10%
Malleable Iron, heavy.....70&5%
Hay.
Wood.....$1.50@$3 00
Lawn—Wood.
XXX .....per doz. 3 00
Automatic ..... " 5 25
Lawn Queen..... " 3 35
Jumbo, 36 teeth..... " 5 50

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

List December 5, 1904.

Black and White Japanned.....66⅔%
Nickel Plated.....66⅔%
Electroplated, Brass, Bronze or Copper.....66⅔%

RINGS

Bull.
Copper..... 2½ in 3 in.
Per doz..... $1.50 $2.00
Rea's Improv'd Self Piercing copper, pr d'z. 2.00
Steel per doz.. .85 .95
Nickel Plated 1.35 ...
and Ringers—Hog.
Blair's Rings.....per doz. $0 56
Blair's Ringers..... " 75
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes..... " 47
Major Rings ..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers... 80
Fruit Jar.
White.....per ℔ 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt 10%
Coppered Iron .....60&10&5%
Tinners' .....60&10%
Hame .....per ℔. $0 10
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
⅛, 5-16-in. Com. on reels..per ℔. 11½c
⅜, 5-16-in. Com. in coils .. " 12c
⅛, 5-16 Imperial in coils . " 21c
Sisal.
1st quality.....12 c
Hardware Grade, rates.per ℔. 10 c
Pure Manila.
1st quality..... " 15½c
Hardware Grade, rates. " 14½c

RULES

Boxwood.....50&10%
Ivory .....

SASH WEIGHTS.

See Weights

SAWS.

Back.
Disston's 25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz. $1.35@$1.60
Disston's.....25%
Cross-Cut.
Disston's.....45%
Dehorning.
Disston's..... " 5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's 30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list) 25%
Keystone.....30%
Enterprise, hand.....per doz.$5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling.....25%
One Man 50%
Panel.
Brown's.....30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's.....25%
Disston's.....25%
Wood.
Common.....per doz. $4 50
Clover Leaf..... " 6

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
" painted.... " 1 75

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 70
1 " " " 15 00

SCRAPERS.

Box.
Triangular..... 4 00
Cabinet.
Cast Steel..... " 60c@75c
Road.
Cubic ft. 7 5 3
Without runners, ea.$4.00 3.75 3.50
With runners.... " 4.25 4.00 3.75

SCREWS.

Bench.
Iron, in,..... 1 1½ 1¾
$3.50 $4.00 $4.75
Wood, white maple..per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial.
Nos. 1 2 3 4 5 6
Per doz. 18c 20c 23c 30c 23c 25c
Wood.
F. H. Bright.....87½&5%
R. H. Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Clipper, grain.....per doz $ 9.56
Clipper, grass..... " 6 27
Clover Leaf Dutchman " 6 10
Honest Dutchman.....
BeVe B.....

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
No. 5 Square,..... " 75
Cup Point, knurled pr. doz.....75
Blind.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch... " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 3 25
Leach's..... " 80
Nash's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz. $1 60
Smith & Hemenway.....30%

SHAVES, SPOKE.

Iron.....per doz. $1.10@$1.85
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%

SHEARS

Pruning.
Buckeye, No. 1.....per doz. $5 75
" No. 2..... " 7 40
California Pat.. 9 in.. " 3 20
" " 10 in.. " 4 00
Draw Cut, No. 3..... " 13 75
" " No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 $2.10 $2.90 $2.80
Star.....per doz. $4.00
Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set.....$0.34 $0.42 $0.70
Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union..... per doz. $6.75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No. 2 Woodford .....per doz. $5 50
No 122..... " 6 00
Ames' new list.....Discount 12½%
Per Doz.
Neverbreak, hollow hck, blk. $15 75
National.... " " " 14 75
Buckeye .... " " " 10 00
Mohawk.... " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Black Diamond.....per doz $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames new list.....Discount 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel,
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Jud's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop " .... " 5 75
" " Grass..... " 5 50

SNIPS, TINNERS'.

Wiss.....40%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 24
Per doz.... 20c 25c 40 54c

Reliance.
Per doz.....light $1.25; heavy $2.50
Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.35
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.

Steel and Iron.....70%
(Add for nickeling, $2.50 per doz., net)
Miter.
Try.
Try and Bevel
Try and Miter.
Fox's.....per doz. $5.75
Winterbottom's 70%

SQUEEZERS, LEMON.

Common Wood.....per doz $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porcelain bowl " 1 90
" glass bowl.. " 2 25
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated.... " 4 50

STAPLES.

Blind.
Barbed.....per ℔ 9½@9¾c
Butter Tub..... " 8@8½
Fence—less than carload.
Polished.....per 100 ℔ $2 30
Galvanized ..... " 2 60
Netting.
Galvanized.....per 100 ℔ 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan.....per ℔ 5½@7c
More Grit..... " 9½c
Washita..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz. $22 00
Arkansas Soft..... " 15 50
Hindostan .....per ℔ 6½@6¾
Oil—Unmounted.
Arkansas Hard.....per ℔ $2 05
Arkansas Soft..... " 1 10
Lilly White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille..... " 7 00
Quinnebog..... " 5 00
Red End..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... 85
Gem, cor'd, decorated.. " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Exelsior ..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety ..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per ℔ 07
Wrought Steel.....per gro. $4 50

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet .....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut .....90&20%
Upholsters Wire.....90&10%
Double Pointed.....90%
Copper.....per ℔ 22c
Canvas Nails.....75&5%
Clout Nails .....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $3.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
Other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Balloon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker...per doz. holes $0 13
Tin Choker..... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation.. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each $2 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed.... $3.00 $3.85 $5.50
Full Ironed.... 3.45 4.50 6.45

TUBS, WASH.

Standard, Wood Ex.
Nos..... 3 2 1 large
Per doz....$5.00 $6.00 $7.00 $ 9.50
Dowell.
Per doz.... 5.35 6.35 7.00 9.50
Cedar.
Per doz.... 6.10 7.10 7.90 10 80
Indurated.
Per doz.... 8.55 9.45 10.80 12.50
Galvanized.
No 2 3
Per doz.....$6.00 $6.75 $7.75

TWINE.

Per ℔
3-ply Cotton Wrapping.....35c
4 " " " 25c
4 " " Extra Wrapping.....27c
4 " " " Hvy. Wrapping..25c
4 " " Wrapping on tubes...27c
3 " " " " cones...25c
4 " " " " " ...25c
India Hemp, ¼-lb. balls.....19c
" " ½-lb. " 18c
" " ¾-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply " ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seine
Nos..... 9 12 15+
Soft.....per ℔ 26½ 26 25
Med..... " 26½ 26 25
Hard 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " 23c
3-ply "B" in hanks.....18c
4 " "B" " 18c
3 " "A" 27c
3 " Silver Finish, in hanks....37c
Fodder or Lath.
120 strand 6½c
200 strand.....

VISES.

Phoenix.....30%
Phoenix Oval Slide,
In. 2½ 3 3½ 4½
Ea. $1 25 $1 50 $1 85 $2 75
Parker's Parallel.....15&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box..... .....40&5%
Adam's Mechanics'.....each 2 50
Williamson Universal,.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50&10%
Ground Ware.....40&10%
Enameled Ware.....40%
Country Hollow Ware, per 100 lbs. $3.00
White Enameled Ware.
Maslin Kettles .....65&5%
Covered Ware, Tin'd and Turn'd 35-10%
Enameled.....45&10%
Glue Pots, Tinned.....30%
Enameled.....35%
Enameled.
Cherry Blossom and Chrysolite.50%

WASH BOARDS—See Boards.

WASHERS.

Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:
In. ½ ⅝ ¾ ⅞ 1 ⅛ 1¼
9c 6½c 5c 4½c 4¼c 4¼c 3½c
Wrought steel in 5 ℔. boxes, per ℔.
In. ½ ⅝ ¾ ⅞ 1 ⅛ 1¼
10c 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—See Machines.

WEDGES.

Ax.....per doz.....30
Galling .....per ℔ 10¢
Saw ..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 00

WEIGHTS.

Hitching .....per ℔ 2½c
Sash—F.O.B. Chicago...pr ton $28 50

WHEEL BARROWS.

Common Railroad....per doz..$17 00
Heavy " .... " .. 24 00
Panama Steel Tray " .. 30 00
Klondike " " .. 28 00

WHEELS.

Corundum .....70&10&5%
Emery.....75&5%
Well In. 8 10 12 14
Per doz.....$2.40 $3.25 $4.00 $6.00

WIRE.

Barbed Painted. Galv'd.
Carloads..per 100 lbs..$2.00 $2.30
Less than car " .. 2.65 2.95
Brass.
In coils.....30%
In 1 ℔ spools, new list.....30%
Broom—Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....30&10%$2½%
1 ℔ spools, new list .....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2.30
Nos. 6 to 9, Galv'd... " 2.80
Hair—New list.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles 70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%
Picture—In coils.....80%@80&10%
In 5 ℔. spools. .....per ℔..25c
Plain—Small lots.....$2.10
Car lots 2.05
Small spools 5c per hundred higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85c net
Always Ready.....50%
Coe's Standard.....40&10&5%
Agricultural..... .70&5%
Ellis Adjustable.....25%
Malleable "S".....per ℔. 09c
Malleable..... " 08c
Stillson Pipe 70%

BEMIS & CALL'S WRENCHES.

Improved Adjustable S nut.....40%
" " S pipe.....40%
Briggs Pattern nut.....40%
Combination Bright 40%
" Black.....40&5%
Steel Handle nut.....50%
Merrick Pattern nut.....50%

WRINGERS.

No. 22, Guarantee....per doz.$22 5
No. 110, Guarantee.... " 28 5
No. 110, Brighton..... " 32 50
No. 110, Bicycle ..... " 31 50
No. 500, Royal ..... " 32 50
No. 350, Universal.... " 28 00
No. 300, Novelty..... " 26 00
No. 310, Keystone .... " 28 00
No. 100, Rival..... " 23 50

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CLASSIFIED LIST.

Adding Machines

Automatic Adding Machine Co., New York, N. Y

Augers—Post Hole

Iwan Bros., Streator, Ill

Boilers—Steam

Boynton Furnace Co., Chicago, Ill
Kellogg-Mackay-Cameron Co., Chicago, Ill
Smith Co., Chas. Chicago, Ill

Boiler Handles

Berger Bros. Co., Philadelphia, Pa

Bolts

Columbus Bolt Wks., Columbus, O
Star Expansion Bolt Co. New York, N.Y

Boxes—Hardware

Green, A. H., New York

Brass and Copper

Hungerford, U. T., Brass & Copper Co. New York, N. Y
Plume & Atwood Mfg. Co., Chicago, Ill

Cabinets—Revolving

American Bolt & Screw Case Co. Dayton, Ohio

Cans

Stuber & Kuck, Peoria, Ill

Carpenter Benches

Grand Rapids Hand Screw Co., Grand Rapids, Mich

Carpenters' Tools

Davis & Cook, Watertown, N. Y
Duby & Shinn Mfg. Co., Branchport Station, Long Branch, N.J
Griffin Mfg. Co., Erie, Pa
North Bros. Mfg. Co., Philadelphia, Pa

Carriage Forgings

Columbus Bolt Works, Columbus, O

Cartridges

Union Metallic Cartridge Co., New York City

Ceilings

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
Kanneberg Roofing & Ceiling Co., New York, N. Y
Keighley Met. Ceiling Co. Pittsburg, Pa
Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wheeling Corrugat'g Co., Wheeling, W.Va

Cement—Plumbers

Obermayer Co., S., Cincinnati, O

Cement—Roofing

Conners, Wm. Paint Mfg. Co. Troy, N.Y

Chains

Bridgeport Chain Co., Bridgeport, Conn

Chains—Jack and Safety

Hungerford, U. T. Brass & Copper Co., New York

Chimney Tops

Holland Furnace Co., Holland, Mich
Iwan Bros., Streator, Ill
Powers Bros., Streator, Ill

Clips—Carriage Trimmer's

U. S. Clothes Pin Co., Montpelier, Vt

Clothes Dryers

Mannen & Esterly, Cleveland, O
Martcross Co., Chicago

Clothes Pins

U. S. Clothes Pin Co., Montpelier, Vt

Coil Springs

Pullman Mfg. Co., Rochester, N.Y

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O
Schoedinger, F. O., Columbus, Ohio
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cookers—Steam

O-hi-o Cooker Co., Toledo, O

Copper and Brass

Hungerford, U. T., Brass & Copper Co., New York, N. Y
Plume & Atwood Mfg. Co., Chicago, Ill

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Wks., Buffalo, N.Y

Cut Offs—Rain Water

Cooney & Geiger, Indianapolis, Ind
Holland Furnace Co. Holland, Mich
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis

Cutlery

Simmons Hdw. Co., St. Louis, Mo

Dampers

Sayre Stamping Co., Sayre, Pa
Taylor & Boggis Fdy. Co., Cleveland, O

Door Springs

Lawson Mfg. Co., Chicago, Ill

Eaves Trough

Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton O
Iwan Bros., Streator, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis.
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Whitacre, J. E. Mfg Co., Rockford, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Elbows—Conductor Pipe

Canton Mfg. Co., Canton, O
Dieckmann, Ferdinand Cincinnati, O
Diener Mfg. Co., Geo. W., Chicago, Ill
Milwaukee Corrugating Co., Milwaukee, Wis.
Eller Mfg. Co., Canton, O
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugating Co., Wheeling, W Va

Elbows—Stove Pipe

Reeves Mfg. Co., Canal Dover, O

Electrical Supplies

Manhattan Electrical Supply Co., New York and Chicago, Ill

Electro Plating Outfits

Hanson & Van Winkle Co., Chicago, Ill

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Enameled Ware

Leffler, Thiele & Co., New York, N.Y
Star Enameling and Stamping Co., Pittsburgh, Pa

Fencing—Wire

Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Files

Carver File Wks., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

Firearms

Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Firearms—Accessories

Stevens, J. Arms and Tool Co., Chicopee Falls, Mass

Flasks—Glass

Bruebach, A., Chicago, Ill

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O
Stevens, F. B., Detroit, Mich

Furnaces—Gas

Blickelhaupt Skylight Works, New York
Mannen & Esterly Co., Cleveland, O

Furnaces—Hot Air

Beckwith, Estate, P. D. Dowagiac, Mich
Bonnot Co., The Canton, O
Boynton Furn. Co., Chicago, Ill
Cox, Abram, Stove Co., Philadelphia, Pa
Forest City Fdy. & Mfg. Co., Cleveland, O
Galusha Stove Works, Rochester, N. Y
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg Co., St. Louis, Mo
Henry & Scheible Co., Cleveland.
Hess-Snyder Co., Massillon, O
Keith Furnace Co., Des Moines, Ia
Kelsey Heating Co., Syracuse, N. Y
Kontny, John, Chicago, Ill
Lennox Furnace Co., Marshalltown, Ia
Mannen & Esterly Co., Cleveland, O
March-Brownback Stove Co. Pottstown, Pa
May & Fiebeger Akron, O
Meyer Furnace Co., Peoria, Ill
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee Wis
Ralt & Co., Walter S., Chicago, Ill
Robinson Furnace Co., Chicago, Ill
Schwab, R. J. & Sons Co., Milwaukee, Wis
Smith, Charles Co., Chicago, Ill
Stanton Heater Co., Martin's Ferry, O
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa
Youngstown Furn. & Supply Co., Youngstown O

Furnaces—Tinners'

Blickelhaupt Skylight Works, New York, N.Y
Burgess Soldering Furnace Co., Columbus, O
Clayton & Lambert Mfg. Co., Detroit, Mich
Diener, Geo. W. Mfg. Co., Chicago, Ill
Turner Brass Works, Sycamore, Ill
Yost Mfg. Co., G. W., Mechanicsburg, Pa

Furnace Pipe and Fittings

Green Fdy. & Furn. Wks., Des Moines, Ia
Meyer, F. & Bro. Co., Peoria, Ill
Mueller, L. J. Furn. Co., Milwaukee Wis
Perfection Furnace Pipe Co., Toledo, O
Robinson Furnace Co., Chicago, Ill
Walworth Run Fdy. Co., Cleveland, O

Gas Lamps
Manhattan Screw & Stamping. Co., New York, N. Y

Generators—Low Voltage
Hanson & Van Winkle Co., Newark, N. J

Hand Screws
Grand Rapids Hand Screw Co., Grand Rapids, Mich

Hand Punching Machines
American Lock Nut Co., Oregon. Ill

Hangers—Door
Richards Mfg. Co., Aurora, Ill
Safety Door Hanger Co., Ashland, O

Hangers—Eaves Trough
Schoedinger, F. O., Columbus, O

Hangers—Garment
Pullman Mfg. Co., Rochester, N.Y

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill
Paxton & Gallagher Co., Omaha, Neb

Hardware Specialties
Arcade Mfg. Co., Freeport, Ill
Carver File Co., Philadelphia, Pa
Pullman Mfg. Co, Rochester, N. Y
Simmons Hdw. Co., St. Louis. Mo
Taylor & Boggis Fdy. Co., Cleveland, O
Smith & Hemenway Co., New York, N. Y

Heaters—Oil
Barler, A. C. Mfg. Co., Chicago

Heating
Detroit Heating & Lighting Co., Detroit, Mich
Kelsey Heating Co, Syracuse, New York, N. Y
United States Reg. Co., Ltd., Battle Creek, Mich

Hinges
Griffin Mfg. Co., Erie, Pa

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Horse Nails
Standard Horse Nail Co., New Brighton, Penna

Ice Cream Freezers
North Bros. Mfg Co., Philadelphia. Pa

Kitchen Utensils
Avery Stamping Co., Cleveland. O
Lalance & Grosjean Mfg. Co., Chicago, Ill
Leffler, Thiele & Co., New York City

Ladders—Shelf
Calander, John, St. Paul, Minn

Lanterns
Berger Mfg. Co., Canton. O

Lawn Mowers
Clipper Lawn Mower Co., Dixon. Ill

Levels
Baker-McMillen Co., Akron. O
Davis & Cook, Watertown, N. Y

Lightning Rods
Maher & Son Lightning Rod Co., Preston, Iowa
Security Lightning Rod Co., Burlington, Wis

Mail Boxes
Blick Williams Co., Indianapolis, Ind
Hessler, H. E. Co., Syracuse, N. Y
Signal Mail Box Co. Joliet. Ill

Metal Ceilings
Northrop. Coburn & Dodge Co., Philadelphia, Pa

Metal—Perforated
Harrington & King Perforating Co., Chicago. Ill

Metal Polish
Hoffman Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago, Ill

Metal Shingles
Burton W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia, Penna
Nat'l Sheet Metal Roofing Co., Jersey City, N. J
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Sykes Steel Roofing Co., Chicago, Ill

Mica
Munsell, Eugene & Co., Chicago

Miters
Whitacre, J. E. Mfg. Co., Rockford. Ill

Mop Heads and Handles
Eagle Cooperage Wks., Circleville. O

Mop Wringers
Eagle Cooperage Wks., Circleville. O

Nails and Tacks—Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Nickel Plating Plants
Hanson & Van Winkle Co., Chicago, Ill

Nuts
American Lock Nut Co., Oregon, Ill
Columbus Bolt Works, Columbus, O

Paints and Paint Specialties
Buckeye Paint & Varnish Co., Toledo, O
Connors, Wm., Paint Mfg. Co., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N. J
Pitkin Co., Geo. W. Benton Harbor, Mich

Patterns—Sheet Metal
Gray, G. L., New York, N. Y

Pencils
Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Photograph Clips
U. S. Clothes Pin Co., Montpelier, Vt

Pistols
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Plungers
Berger Bros. Co., Philadelphia, Pa

Polish—Metal
Hoffman, Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago, Ill

Polish—Stove
Black Silk Stove Polish Wks., Sterling, Ill
Nickel Plate Stove Polish Co., Chicago, Ill

Pumps
Berger Mfg. Co., Canton, O
Hess-Snyder Co., Massillon, O

Punches
American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Niagara Mchine & Tool Works., Buffalo, N.Y

Putty—Stove
Connors, Wm. Paint Mfg. Co., Troy, N.Y

Radiators
Kellogg-Mackay-Cameron Co., Chicago, Ill
Rochester Radiator Co., Rochester N.Y

Rasps
Disston. Henry & Sons., Philadelphia. Pa
Carver File Wks., Philadelphia, Pa

Razors
Smith & Hemenway Co., New York, NY.

Razor Guards
Weiss, L. T., Brooklyn, N.Y

Registers
Ferrosteel Co., The, Cleveland, O
Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Rochester Radiator Co., Rochester, N.Y
Schwab & Sons Co., Milwaukee, Wis
Standard Register Co., Cleveland, O
Symonds Mfg. Co., E. St. Louis, Ill
United States Register Co., Ltd., Battle Creek. Mich

Register Faces
Wooden Ventilator Co., East Palestine, O

Rifles
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Rivets
Columbus Bolt Works, Columbus, O
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Roofing—Asphalt
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
American Sheet & Tin Plate Co., Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt. Chicago, Ill
Kanneberg Roofing & Ceiling Co., New York
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City, N. J
Reeves Mfg. Co., Canal Dover, O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornamen Co., St. Paul, Minn
Sykes Steel Roofing Co., Chicago, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Roofing Cement
Connors Paint Co., The Wm., Troy, N.Y
Taylor Co., N. & G., Philadelphia, Pa

Roof Paint
Dixon, Jos. Crucible Co., Jersey City, N.J

Rules
Lufkin Rule Co., Saginaw, Mich

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Saw Sets and Saws
Disston, Henry & Sons, Philadelphia, Pa
Goodell-Pratt, Greenfield, Mass
Smith & Hemenway Co., New York, N.Y

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screen Door Checks
Pullman Mfg. Co., Rochester, N. Y

Screws
Columbus Bolt Works. Columbus, O

Screw Drivers
North Bros. Mfg. Co Philadelphia, Pa

Scuttle Openers
Bickelhaupt, G., Skylight Works, New York, N. Y

Seamless Tubing—Brass & Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Shears
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Simmons Hdw. Co., St. Louis, Mo
Wagner, C. DeWitt, Cedar Rapids, Ia
Weiss, H. & Co., New York, N.Y

Sheets—Black and Galvanized
Berger Mfg. Co., Canton, O
Taylor Co., N. & G., Philadelphia, Pa
Wheeling Corrugat'g Co., Wheeling, W.Va

Sheet Metal Ornaments
Gerock Bros. Mfg. Co., St. Louis, Mo

Sheet Metal Patterns
Gray, G. L., New York, N. Y

Sheets—Planished
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel
Tanner & Co., Indianapolis
Taylor Co., N. & G., Philadelphia, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

Shot Guns
Stevens J., Arms & Tool Co., Chicopee Falls, Mass

Shovels
Avery Stamping Co., Cleveland, O

Siding
Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis

Sifters
Stuber & Kuck. Peoria, Ill

Skylights
Eller Mfg. Co. Canton. O
Galesburg Cornice Wks., Galesburg, Ill
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Skylight Gearing
Bickelhaupt, G., Skylight Works, New York. N. Y
Weiss, H. & Co., New York, N.Y

Slate Roofing
Auld & Conger Co., Cleveland, O

Solder
Taylor Co., N. & G., Philadelphia, Pa

Solderene
Solderene Co., The Boston, Mass

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, Branchport Station, Long Branch, N. J

Stampings—Sheet Metal
Avery Stamping Co., Cleveland. O

Stoves and Ranges
Beckwith. P. D. Estate, Dowagiac. Mich
Chicago Stove Works, Chicago. Ill
Clark, Geo. M., & Co., Chicago, Ill
Comstock-Castle Stove Co., Quincy, Ill
Cox Stove Co., Abram, Abram, Pa
Culter & Proctor Stove Co., Peoria, Ill
Foster Stove Co., Ironton, O
Howes, S. M., Co., Boston, Mass
Kontny, John, Chicago. Ill
Ringen Stove Co., St. Louis, Mo
Schneider & Trenkamp Co., Cleveland, O
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Summit Stove Co., La Crosse, Wis
Union Stove Co., New York, N.Y
Van, John, Range Co., Cincinnati, O
Willard, Wm. G., St. Louis, Mo

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N.J

Stoves—Gas
Stove & Range Co. of Pittsburgh Pittsburgh, Pa

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N Y
Weller Pattern Co., Quincy, Ill

Stove Pipe
Hemp & Co., St. Louis, Mo

Stove Pipe Thimbles
Marvin Mfg. Co., Oberlin, Kans
Stuber & Kuck. Peoria, Ill

Stove Repairs
Brauer, A. G. Supply Co., St. Louis. Mo
Dust, Wm. T. Co., Detroit, Mich
Reeves, S. V., Philadelphia, Pa

Stove Trimmings
Cleveland Nickle Works, Cleveland. O

Stove Trucks
Arcade Mfg. Co., Freeport, Ill

Sugar Kettles
Sperry, D. R. Co., Batavia, Ill

Supplies—Polishing
Hanson & Van Winkle Co., Newark, N J

Supplies—Stove Dealers'
Brauer, A. G., Supply Co., St. Louis, Mo

Tanks
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Tapes
Lufkin Rule Co., Saginaw, Mich

Technologist
Hooper, C. N. Dubuque, Iowa

Test Tube Holders
U. S. Clothes Pin Co., Montpelier, Vt

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tin and Terne Plate
Taylor Co., N. & G., Philadelphia, Pa

Tinners' Tools
Berger Bros. Co., Philadelphia, Pa
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Smith & Hemenway Co., New York N.Y
Taylor Co., N. & G., Philadelphia, Pa

Tinplate
American Sheet & Tin Plate Co. Pittsburgh, Pa
Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Schoedinger, F. O., Columbus, O
Taylor Co., N. & G., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Tinware Trimmings
Berger Bros. Co., Philadelphia, Pa

Tools, Etc.
North Bros. Mfg. Co., Philadelphia, Pa

Tools—See Carpenters Tools

Tools—Linemen's
Smith & Hemenway, New York, N.Y

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Brass and Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Ventilators
Burt Mfg. Co., Akron, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago Ill
Globe Ventilator Co., Troy, N.Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros. Streator, Ill
Pullman Mfg. Co., Rochester, N. Y
Schoedinger, F. O., Columbus, O

Wagons
Sycamore Wagon Wks., Sycamore, Ill

Washers
Columbus Bolt Works., Columbus, O

Washing Machines
Bramner, H. F., Mfg. Co., Davenport, Ia
White Lily Mfg. Co., Davenport, Ia and Toledo, O

Wire Goods
Denning Wire & Fence Co., Cedar Rapids,
Pittsburgh Steel Co., Pittsburgh, Pa

Wants and Sales

For Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F. St., N. W. Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Application."

For Sale—A first-class stove and tin store with a good tin shop in connection. Well equipped with tools. Old reliable business stand. Selling on account of death of owner. Address, Mrs. M. L. Boyer, West Liberty, Ohio, Box 81. 8-ufn

For Sale—Hardware business. Excellent north side location. Very prosperous. Thoroughly established. Worthy of immediate investigation. Address, Fisher & Wesemann, 130 Dearborn St., Chicago. 8-3t

To Exchange—120 acre farm. Fine building with personal property for stock of hardware. Address H. M. Beimler, 759 12th St., Grand Rapids, Wis. 8-3t

For Sale—Two No. 7 Humphrey Mfg. Co.'s Crescent Instantaneous Hot Water Heaters, nickel-plated. New, all complete with 16 feet 4 inch plated copper pipe. Boxed ready for shipment; $25.00 for the two complete. Address, Loyd Hardware Company, Pittsfield, Ill. 8-2t

For Sale—Edison Diaphragm Mimeograph for duplicating typewriting only, with printing capacity 7¼x12. New, never used; will sell at a bargain. Address, F. B. Karl, Delaware, Ohio. 8-3t

Wanted—To buy a second-hand 8 foot Robinson brake. Must be in good condition. Address, Acme Roofing & Cornice Company, 486 Selby Ave., St. Paul, Minn. 8-3t

For Sale—Hardware, stove and tin business. Northern Ohio; good town, farms and rooms. Rent low, nice clean stock of fixtures. About $4,500 cash or bankable paper. Established 33 years. Chance of a lifetime. Investigate. Address E 14, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8-3t

Wanted—A partner to furnish money to patent an apparatus for keeping water off a person while repairing pumps. Sure winner. Half interest given. Write for particulars. Address E 11, care THE AMERICAN ARTISAN, 69 Dearborn street, Chicago. 7-3t

For Sale—Tin and furnace shop in a live and growing city. Reason for selling, poor health. Address E10, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7-3t

For Sale—Good, well established tin and slate roofing business in Ohio city of 5,000 population. Tools are new and can be reduced to suit purchaser. Address 805 Superior Ave., Northwest, Cleveland, Ohio. 7-3t

For Sale—A clean stock of hardware and plumbing goods; doing a good business; invoice about $5,000. No trade. In a good Eastern Iowa town, about 2,000. Good reason for selling. Address D 91, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

For Sale—First-class tinshop with tools as good as new. Also new steel brake, horse and wagon. Will invoice about $2,000. Cash. Other business outside of city demands full attention. Address Elmer Kempf, 23 Newburn St., Cleveland, Ohio.

For Sale—A rare chance to buy an up-to-date hardware store. Clean stock. Paying business. Must sell at once on account of poor health. Good town and fine farming country. Honorable competition. Price not demoralized. Requires about $7,000 for stock with building and lot. All up-to-date and best location in town. Part time if wanted. No trade considered. Stock about $5,000. Building and lot 24x140. Fine rooms on second floor and a bargain at $2,000. Write or call on J. W. Leighton, Livermore, Iowa. 1-ufn

Stock of Hardware for Sale—This is the best proposition in Illinois to go into the hardware business. Positively no trades. Address E5, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

For Sale—A small stock of hardware, tin and granite, full set of tinners' tools, wagon cart, two extension and two plain ladders. Will sell very reasonably. Everything in ware new; tools in first-class condition, P. S. & W. machines. A good tinner will do well to investigate this offer. Address E. H. May, Box 537, Bedford, Ohio. 6-3t

TINNERS' TOOLS.

Wanted—To buy in good condition, one 6 inch Stows beading machine. One 21 inch tin folding machine. Address F. J. Drilling, Larrabee, Iowa. 8-3t

For Sale—One set tinner's tools and machines in good condition. Send stamp for list and prices to E. F. Walker, Wymore, Nebraska. 7-3t

For Sale—
1 Pohlman stove pipe crimper.
4 1"x¾" hand seamers.
1 pr. No. 5-7" cut bench shears.
1 20" edging machine.
1 Bell's 1 and 1¼" edging machine.
All in good shape. Address John F. Cartwright, 118 Main St., Bowling Green, Kentucky. 6-3t

For Sale—Part of a set of tinners' machines and tools at a bargain. Address, M. V. Brickey, Rankin, Illinois. 5-ufn.

HELP WANTED.

Wanted—A good tinner and furnace man. To a married man we offer steady work and good wages in one of Chicago's nicest suburbs. Address Stuessy Brothers, La Grange, Ill. 8-3t

Wanted—A good steady reliable tinner and furnace man. One who understands something of plumbing and can clerk if necessary, who can turn his hand to any work that is liable to come into a country shop. Steady work to the right man. Married man preferred. Address F. W. Spencer, Spencerport, N. Y. 8-3t

Wanted—A tinner who can do plumbing and heating. A good steady job for the right man. Don't apply unless you are a reliable man. Address The Arndt Hardware, Blair, Neb. 8-3t

Wanted—Tinner and an all round man for general shop work. Steady job to the right man. Must be sober and reliable. Address, E. J. Ketchum, West Duluth, Minn. 8-3t

Wanted—Tinner and plumber. A man who is willing and competent to do any work that comes to a country tinshop, and can do plumbing, hot water and hot air heating, can get steady employment with C. J. Johnson, Dell Rapids, South Dak. 8-3t

Wanted—A first-class tinner who is good both in shop and outside. Steady work. State wages wanted. Address Jno. F. Cartright, 118 Main St., Bowling Green, Ky. 8-3t

Wanted—Two good all around tinners. Good wages and steady work. Address Hoernel Hardware Company, Racine, Wis. 8-3t

Wanted—Good tinner who can do plumbing and heating. Must be good mechanic, sober, steady and reliable. Steady position to good man. Address E 15, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8-3t

Wanted—A good tinner. Open shop. Address Barrett Hardware Co., Joliet, Illinois. 7-2t

Wanted—At once, experienced hardware clerk. Good wages, permanent position. Send reference with application. Address Phil. Neufeld & Co., Green Bay, Station A, Wisconsin. 7-ufn

Wanted—A tinner. Steady work by the year for a tinner who understands furnace work, plumbing and pump work. State wages wanted and experience in first letter. Address Wm. Wilker, Wyoming, Iowa. 7-3t

Tinner Wanted—Young man of three or four years' experience who is able to do galvanized iron and furnace work. Steady job for the right party. Address H. C. Bertholdt, 429 Main street, Menominee, Michigan. 7-3t

Wanted—An up-to-date tinner, plumber and steam fitter. Must be a good all-round man, capable of doing first-class work. South Dakota city of 6,000. Steady position at $20.00 per week. Address E 12, care THE AMERICAN ARTISAN, 69 Dearborn street, Chicago. 7-1t

Wanted—An all around jobbing tinner. Apply to James Barrett, 206 West Fourth St., Alton, Illinois. 6-4t

Wanted at Once—A good all around tinner and plumber, must understand furnace work. A good job for a married man, a good town, good schools and steady work the year round. Address M. C. Daily Hardware Company, Dunlap, Iowa. 6-3t

Tinner Wanted—Must be a good all around man and sober. Steady work. Apply 630 West 79th St., Chicago. 6-3t

Wanted—At once, first-class tinners; also two furnace men. Steady work and good pay to good men. Address Churchill Hardware Co., Galesburg, Ill. 6-3t

Tinners Wanted—Six (6) good tinners wanted at once. Apply to Griffin & Schell, Macomb, Illinois. 6-2t

Foreman Wanted—To take charge of factory making tinware. One accustomed to dies and presses. Steady position to the right party. State age, experience and salary wanted. Correspond with Cooney & Geiger, 19 and 21 East South St., Indianapolis, Indiana. 6-ufn

Wanted—Plumber and tinner. Must be able to do a first-class job of lead work, experienced at hot air work. All hot air fittings shipped direct from factory made up. Only man wanting steady work considered. City of 6,000. Address, D. D. Darby, 116-118 Broadway, Denver, Colorado. 5-3t.

Wanted—A single young man who is sober and honest. One who can do roofing and spouting and the repair work that comes to an ordinary store. Who is looking for a steady place, and whom I can take to my home as one of the family. Prefer one who speaks German. Write to M. T. S. Liesveld, Hickman, Nebraska. 1-ufn

SITUATIONS WANTED.

Situation Wanted—By first-class tinner of twenty years' experience as hot air furnace and general job worker. Strictly sober and reliable. Nothing but permanent position considered. Address E13, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8-2t

Wanted—Position as salesman for heavy or shelf hardware. Am familiar with tinware, sheet metal, enameled ware, etc. Am at present covering southwest Iowa and northwest Missouri. Am not particular as to territory but want a change. Address E9, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7-3t

Position Wanted—By a strictly sober and competent tinner and furnace man with twelve years' experience. Plenty of work and good pay. Address E6, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

Situation Wanted—By a practical up-to-date, all round tinner. I can do ordinary plumbing work such as installing bath tubs, lavatories, closets and also install hot air furnaces. I have had 15 years' experience at the trade and am considered a capable workman. Situation in eastern or southern Iowa preferred. Address E4, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

Situation Wanted—By a first-class tinner and furnace man. Steady work. Northern Minnesota or North Dakota. State wages. Address Chas. Ewalt, Rolla, North Dakota. 6-3t

Position Wanted—First-class all around tinner and sheet metal worker desires position with good firm where ability and strict attention to business will be an item; 26 years' experience. Am an A1 inside and outside man. Temperate and capable of taking charge of shop. Wages $3.00 per day. Outside city. Address Frank W. Z. Roberts, 27 Stevenson St., Freeport, Illinois. 5ufn

Position Wanted—By a young tinner with three years' experience, would like steady place the year around, where I can finish learning the trade. Am an experienced hardware and farm machine man and can do work that comes to a country shop. Best of references. Address D. W. Noble, Mattoon, Wisconsin. 6-3t

SPECIAL NOTICES.

Special Notice

We want to get in touch with a good jobber or warehouse to distribute our stoves throughout the Northwest. Address with full details, "B-60" care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-ufn

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Six first-class tinners. A steady position the year around for the right men. A good shop and good tools. Write at once to C. A. Peck Hardware Company, Berlin, Wisc.

8-u. f. n.

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OF SHEET METAL PATTERN DRAFTING

Do You wish to be a Cutter?
If so, Here is Your Opportunity

This school is offering a **three months' trial** for $5.00 to anyone who is interested in **Sheet Metal Pattern Drafting.**

The trial will convince you that this course is just what you want. **Pattern Drafting** from start to finish.

Cut out this ad. and send it to the address below, with $5.00 enclosed, and the three months' drawings and instruction sheets will be sent you by return mail.

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WANTED

By a large manufacturing company a really capable traveling salesman. Must be a man of first-class habits and character, and of correct principles. Must be an experienced and successful salesman. Must have behind him an unimpeachable record and must have the ability to earn a good salary. Address "Manufacturer," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8-1t

Special Notice

HAVE HAD CONSIDERABLE experience calling upon stove manufacturers and hardware jobbers. Can handle specialty to good advantage. Am desirous of making a change. Address "P. D. Q." care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago.

8-ufn

TRAVELING SALESMAN for North Dakota and western Minnesota, also one for northern Wisconsin. Commission basis, with privilege of selling another line. Must be familiar with Tin Ware, Enameled Ware and Sheet Metals. First class references required. The Republic Metalware Co., Successors to C. Sidney Shepard & Co., Chicago, Ill.

WANTED

Four first-class tinners; furnace men preferred; good wages for sober men. Apply Auburn Park Metal Works, 540 W. 79th St. Chicago.

5-ufn

Build Your Own Boats

From my full sized paper patterns and drawings made in 15 sizes.

Prices from $1.50 up.

Galvanized Steel Launches, Canoes, Pleasure and Hunting Boats, are light, safe, durable and easily made, anyone familiar with tinners' tools can build them. No special tools required. Write for circular and information.

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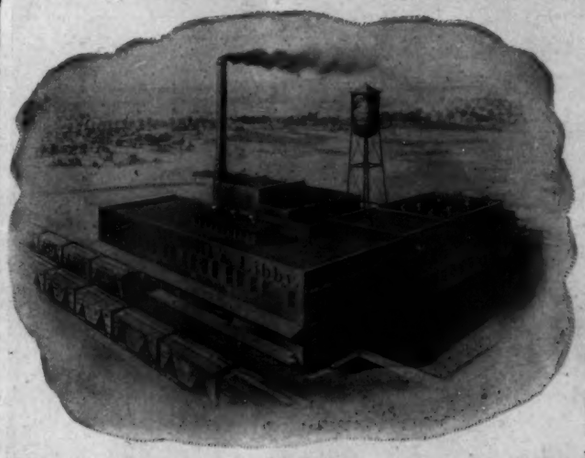
Ticonderoga Flake Graphite reduces friction losses in cylinders, bearings, and at all friction points. Get free sample 18-C.
Joseph Dixon Crucible Co., Jersey City, N.J.



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are not only superior in workmanship, but in the way they are made. Provided with patented sliding sleeve dampers, which are instantly adjusted to any degree, without shutting out the light. They are storm and dust proof, whether open or closed. They have a powerful "pull," and can be furnished in a variety of sizes to ventilate any building.

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Can be furnished with metal top if desired.

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Largest manufacturers of Oil Filters and Exhaust Heads in the world.

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To take charge of our factory. A man with ability, energy and push; a producer. Must have general knowledge of tool and die work. We manufacture automobile parts in sheet metal and castings, Radiators, Hoods, Tanks, Mufflers, Fenders, etc. Permanent position for the right man. Write fully, giving experience, or call on THE KINSEY MFG. CO. Dayton, Ohio.

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I can pay the highest market prices F O. B. your city, for all kinds of old metals, such as copper, brass, zinc, lead, babbitt, skinnings, etc. Drop a line and I will be glad to name my best prices.
H. KANDER, Bowling Green, Ohio.
5-ads

WANTED

Stove Salesman for Kansas and Oklahoma. Give reference, age and salary expected. CULTER & PROCTOR STOVE CO., Peoria, Ill. 5-3t

FOR SALE

Have completely equipped metal working factory, manufacturing patent specialties, with dies, tools, presses, gas engine, etc., that can be bought right and can be moved if desired. This business will make a fortune for the right man; is not seasonable but can be run all the year. $5,000 or less takes it. HOWARD, 107 Bethune East, Detroit, Mich. 5-4t

For an Investment

Look at this. Controlling interest in an old established Sheet Metal Manufacturing and Jobbing Plant. Has paid more than **25% net for seventeen years.** Trade on the increase. Reason for selling, ill health. Write Ill-health, care AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill.

Foreman Wanted

To take charge of factory making tinware specialty; one accustomed to dies and presses. Good salary and desirable position for capable man. State experience. Address "Foreman," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.
10-ads

WANTED

Salesmen for Michigan. One who is acquainted with the house-furnishing trade in that State and who has had experience in Sheet Metal goods line. Address, REPUBLIC METALWARE CO., Buffalo, N. Y. 5.1t

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Experienced and high class foreman of furnace shop to take an interest in the business and manage a retail furnace business in large northern city. No capital required but reply must come quick. Address Furnace Foreman, care AMERICAN ARSISAN, 69 Dearborn Stt., Chicago. 5-2t

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Salesman with established trade in Northern Illinois and Indiana to sell on commission a Trade Mark line of Stoves and Ranges. A good chance for the right party.—Address "Indiana" care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago.

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Patented Proposition in the United States

HEATING ATTACHMENT that will burn HARD COKE and ANTHRACITE in an OPEN GRATE.
17 Years Protection.
Manufacture CHEAP.
Will sell Illinois rights for $25,000 CASH.
Stove or Grate Manufacturer can make $100,000 in a year.
Details Supplied.

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Good improved farm in excellent location for stock of hardware or hardware and implements. Give full description of stock, and price of any real estate that would be included, in your reply. Address "Nilco," THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.
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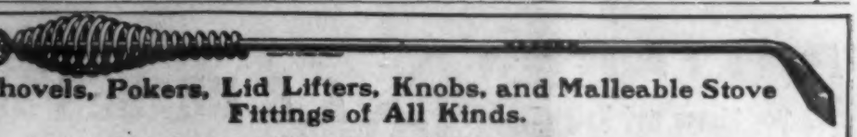

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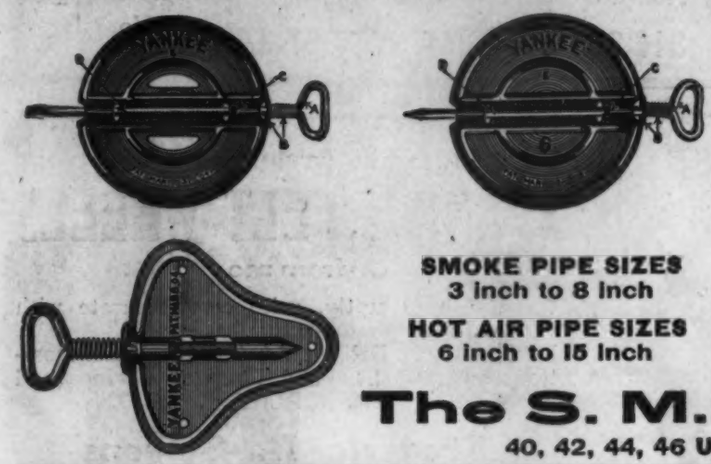

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Any Manufacturer, Hardware Merchant or Artisan in search of another location at some town where conditions would be "Right," should investigate the excellent opportunities existing in the Southwest, especially in the new STATE OF OKLAHOMA along the lines of the

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For the Merchant or Artisan, excellent trade conditions prevail; while the Manufacturer would find all conditions favorable and also secure some inducements from Commercial Clubs.

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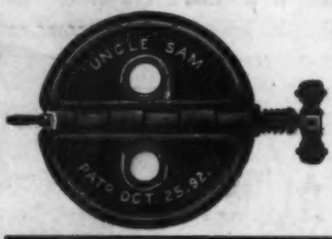
NONE BEATS THE

Uncle Sam Damper



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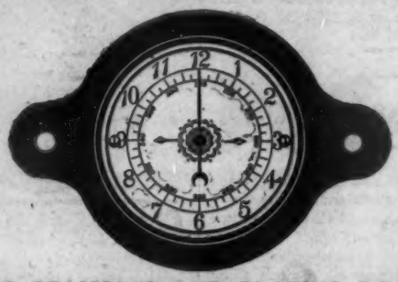

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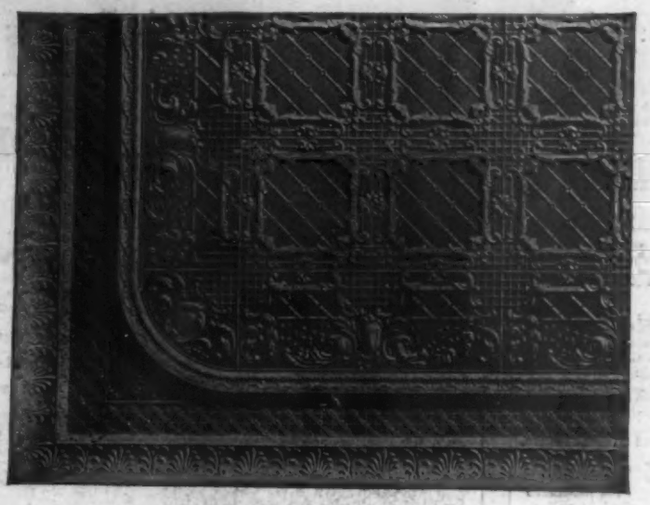

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Solderene is a mending substance, a high grade solder, made by an entirely new process requiring no rosin, acid or other fluxes in using. It appeals instantly to the people needing such an article because of its simplicity and evident merit.

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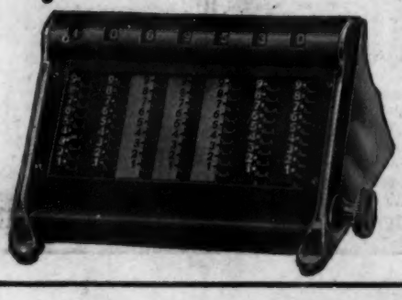

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JUST BLOW ALL YOU LIKE.

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Our **METAL SHINGLES** are giving universal satisfaction, and make a very desirable ornamental roof. Get our prices.

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Manufacturers **CANTON, OHIO, U. S. A.**

Two Reasons Why The Steel Brakes Are Better

Others Will Follow

1. By our patented construction we have succeeded in getting the greatest amount of strength with the minimum weight. They work much faster and easier, and do fully one-fourth more of the average work than any other brake.
2. They are made of Bessemer Steel, and all the working parts where strength is required are made of non-breakable steel castings.

You will be surprised to find out how cheap you can buy this up-to-date machine

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PERFORATED METALS

OF EVERY DESCRIPTION, FOR ALL PURPOSES AND FOR SCREENS OF ALL KINDS

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The new ceiling and side wall on that room—

What shall it be? **Steel,** of course—because it is the **most modern, sanitary** and **inexpensive,** practically **lasts forever.**

Write to-day, giving dimensions and particulars. We will go into the matter with you thoroughly.

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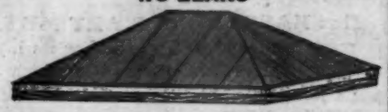
KNOCKED DOWN SKYLIGHTS

CRATED READY FOR SHIPMENT NO SOLDERING NO PUTTY NO LEAKS



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We Have a Hardware Delivery Wagon That You Can Depend Upon

Body 20 in. from the ground; full width; regular heighth wheels; and yet will turn short.

EASY TO LOAD AND UNLOAD

Durability guaranteed.

Complete catalogue on request.

Mention this paper and address in full.

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From THEODORE KELLER, West Hoboken, N. J.

Enclosed please find $2.00 for your most welcome weekly, THE AMERICAN ARTISAN. Whenever I get into an intelligent conversation, I can never praise it enough. Kindly send me the Tinsmith's Pattern Manual, and if it is as good as the last one I shall have a pair of good books.

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If you fully realized the immense advantage of having a metal ceiling air-tight and dust-proof, you, too, would agree with us in saying that Lock-Joint is the correct construction.

Lock-Joint costs just a little more, but—

You may save money in the first cost by getting Keighley's prices on the Lap-Joint metal ceiling also.

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Our designs are very artistic, composed of the latest patterns. Easily and quickly applied.

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We are large manufacturers—small profits—

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is larger and more complete in variety of sizes and kinds than that of any manufacturer in the country, comprising an assortment of
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Made from Galvanized Tin and Painted Tin.
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SKYLIGHTS Finials Ventilators
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A leading Southern architect writes us:—

"N. & G. Taylor's Old Style tin is now protecting from the inclement weather and storms that rage on the outside of my office, as it has protected my reputation as an architect for the past twelve years when specifying the same as a top covering of my many designs."

Experience has taught this architect that he can depend upon "TARGET AND ARROW Old Style."

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TARGET AND ARROW Old Style roofing-tin is handled by all leading hardware jobbing houses throughout the United States.

Note that we now use the old name for the brand—"TARGET AND ARROW Old Style."—rather than the words "Old Style," which have been imitated in every possible way by other tinplate houses.

Send for our "Guide to Good Roofs," giving arguments in favor of tin roofing.

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At a Practical Trade School!

Don't spend years as an Apprentice. We can teach this big paying trade by actual practice at the work, and under competent instructors. Our course includes

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Our graduates are recognized as first class workmen. We also have

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USED BY ALL THE LEADING STOVE AND RANGE MANUFACTURERS:

W. Dewees Wood Company's Patent Planished **Iron.**
Wood's Cleaned Refined Smooth Finish.
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A Plumber's Cement that Needs No Caulking

Those hard-to-get-at, awkward places are easy to fix if you try the modern, simple way. Use

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and make joints that will stay tight—that can't get loose—that do away with any possible chance of sewer gas leaks.

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Conductor Pipe, Eaves Trough, Roof and Box Gutters, Valley, Ridge Roll, Mitres, Elbows and Shoes

That Rust Out Within 25 Years!

Look for Brass Label on each Joint with above guarantee. Write for Sample and Prices

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CONDUCTOR ELBOWS

(PATENTED)

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Cost Least On the Job.

One Piece.
1225 Varieties.

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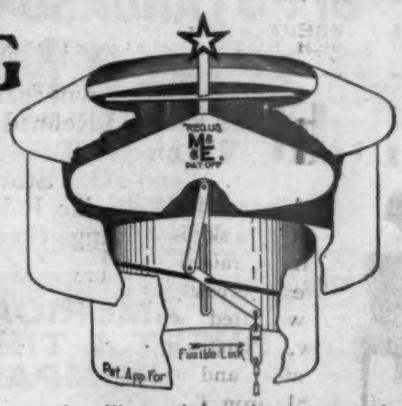
HEAVIEST GAUGE ELBOW ON MARKET

FERDINAND DIECKMANN

Station B, CINCINNATI, OHIO

The FIRE-RETARDING "Star" Ventilator



The Roof of this Ventilator is movable vertically, and is held in its highest open position by a lever movement, controlled by a fusible link. In case of a fire the link parts, and the top drops down by gravity, closing the opening.

The top is also a damper itself, as by regulating the chain length the opening is partially or wholly closable at any time, and still retaining its automatic closing feature in case of fire.

Therefore we offer the

Combination { **1st. The Automatic Fire-Retarding "Star" Ventilator** / **2d. A Controllable Damper** } **All in One**

Hundreds of these Ventilators now in use. They are absolutely storm-proof, and our Ventilators have a proven speed of air exhaust in excess of any other made.

Can be supplied with glass top. Simpler and with fewest parts made. Also lightest in total weight, without sacrifice of proper gauge.

"Reg. in U. S. M&E Pat. Off."

Merchant & Evans Company

Successors to Merchant & Co., Inc.

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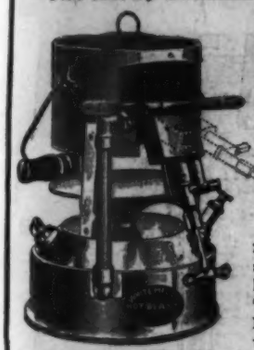
Hottest on Earth
The No. 39 Bonanza Furnace



That is what we give you when buying a No. 39 Furnace for all around work. The tank is made of seamless drawn brass. We make many styles of Furnaces and Torches for kerosene as well as gasoline. Our Catalog will give you full particulars. Order through any jobber, or send us $4 50; we will ship direct.

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There is a Reason

for the steadily increasing demand for the No. 1 and No. 5 Fire Pots.

Their use saves the user many times their cost and they have so many labor-saving advantages not even hought of by others. Mechanics who know say, "We cannot afford to use other makes if they cost nothing." Jobbers supply at factory price or we will ship direct if cash accompanies the order.

No. 1 Fire Pot $6.00 Net.
No. 5 Fire Pot exactly like the No. 1, only smaller, $4.50 Net.

CLAYTON & LAMBERT MFG. CO.
DETROIT, MICH., U.S.A.

Skylight Lift

A new device whereby a skylight can be raised or lowered as easily as a weighted window. Constructed of steel and malleable iron, has a movable slide holder to adjust itself, and can be opened to any distance desired. Always locks **automatically,** open or shut. Can be applied to either hipped or flat skylights easily and quickly.

Send for Pamphlet

C. Bickelhaupt Skylight W'ks
243-245 West 47th St., NEW YORK
Trade "G.B." Mark

R. W. PETERSON & CO., Florence, Wis., write:
"Please discontinue our 'ad' for tinner. We have a man and are well pleased with results. Your paper certainly does the work. No hardware store can afford to be without it."

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FOR CONDUCTOR PIPE—ALL SIZES

For Brick or Wood

Made of the best malleable iron and first-class in every way. Send for catalogue.

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It Can't Be Beat! THE SUPERIOR

IS THE CHEAPEST BEST CONSTRUCTED
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MANUFACTURED

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Iwans' Volcano Revolving Chimney Top

Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

Send postal for catalogue.

IWAN BROTHERS
Mfrs. of Hardware Specialties
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Marvin Safety Flue Thimble

MADE OF GOOD QUALITY GALVANIZED IRON

We claim this to be a life saver a property saver and the only absolutely safe flue thimble made.
No more walls disfigured by driving nails in them to hold pipe in place.
No more trouble of the pipe entering the flue far enough to shut off the draft.

Write for particulars.
Salesmen wanted to introduce to Hardware Jobbers.
Manufactured by

MARVIN MANUFACTURING COMPANY, Oberlin, Kansas.

Patent allowed Jan. 28, 1907.
Any infringement will be prosecuted to the full extent of the law.

The Everlasting Rain Water Cut-Off

Requires No Soldering

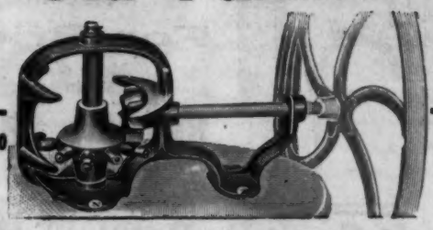
Will not rust out; freezing will not affect it; made of cast iron in 3" and 4" sizes.

Aluminum Finish

Our Specialty and Furnace Catalog for the asking.

HOLLAND FURNACE CO., Holland, Mich.

Old Faithful



Is there a Dealer who has not heard of

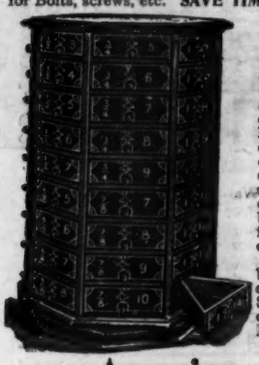
The "O. K." Rotary

that every day good faithful dependable washer of which there are hundreds of thousands in daily use and every one a satisfaction giver, and the best repeater for sales known? **If you are that dealer,** it's time to get acquainted. A postal will do.

H. F. BRAMMER MFG. CO., DAVENPORT, IOWA

Revolving Cases

for Bolts, screws, etc. SAVE TIME and MONEY



A necessity for Hardware Dealers, machine shops pattern shops, and in fact any one who handles small articles. Last indefinitely. Made octagonal or square as desired; also with blank drawer fronts with label holders.

Descriptive booklet sent on application. Sold by all first class Hardware Dealers.

American Bolt & Screw Case Co.
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THE WHITE ROSE

IS WITHOUT A COMPETITOR

It is actually BALL BEARING and has proved the most phenomenal seller ever placed upon the market.

WRITE TODAY FOR EXCLUSIVE AGENCY

WHITE LILY MFG. CO.
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Eagle Mop Wringers and Ohio Detachable Mop Heads and Handles

Meet every service demanded of them. WHY?
Because they are built upon the correct principles. They have been hailed with delight by users, and the universal verdict is, I WANT NO OTHER. Ask your jobber or write us direct. A catalogue for the asking.

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Gentlemen: Please discontinue my ad. I have sold the stock and die. The first issue did the business. Yours truly. E. J. KETCHUM. West Duluth. Minn.

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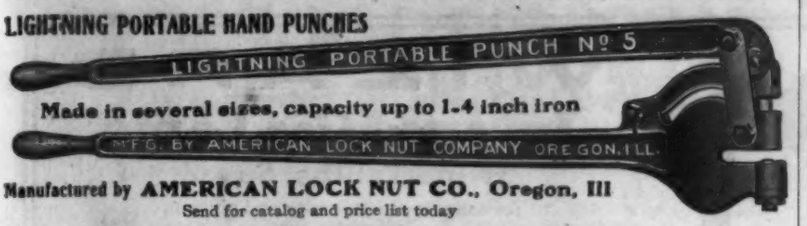

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Manufactured by **AMERICAN LOCK NUT CO., Oregon, Ill**

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Made from very thick metal, without Stay Bolts, joint packed in such a manner as to never need repacking. A little higher priced than some, but they are safe and tight.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS **Batavia, Ill.**

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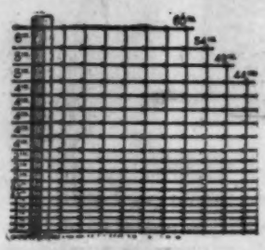

Is the fence that pleases your customer. It is made on scientific and practical principles. It is made in various sizes, weights and meshes, for stock, hogs, poultry and rabbits. We can also sell you Lawn and Cemetery Fencing, Gates, Barb Wire, Nails, Staples, Portable Corn Cribs and Grain Bins.

Write for Catalogue and Prices

THE DENNING WIRE & FENCE CO.
CEDAR RAPIDS, IOWA.

EVERY GALLON GUARANTEED

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MIXED PAINTS

are the Paints you should handle.

Made from Pure Linseed Oil, White Lead, Oxide of Zinc and Highest Grade Coloring Material

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Clipper Lawn Mower Co. DIXON, ILL.

Manufacturers of Hand and Pony Mowers, also Marine Gasoline Engines from 2 to 8 horse power.

THE MOWER
That will kill all the weeds in your lawns

If you keep the weeds cut so they do not go to seed, and cut your grass without breaking the small feeders or roots, the grass will become thick and the weeds will disappear. The Clipper will do it. If you wish Clippers, send in your orders.

THE EASY
Washing Machine

It Sells on Sight
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Has the largest rubbing capacity and is the EASIEST RUNNING machine on the market.

Write at once for our Attractive, Exclusive Agency Offer.

Manufactured by

The
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The Hawkeye
Automatic Hog Waterer

Warranted for 5 years.
Holds 5 Gallons.
Nothing to get out of order.
Four Hogs can drink at one time.

We want one Hardware Merchant in each town as exclusive agent.

Paxton & Gallagher Co.
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SOLE AGENTS FOR NEBRASKA, WESTERN IOWA AND NORTHERN KANSAS

F. D. BURGESS,
WAUPACA, WIS., writes,

"I advertised a set of Tinner's Tools in your paper and have sold them, and I have received letters from parties wanting them, from all parts of the United States. That goes to show that The American Artisan has a great circulation."

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Inverted Gas Lamp
Nine-Tenths Saved

of the cost of Electricity and gives as brilliant a light.

They Sell Easily

and make a rich window display. For the home, office, store, school or public building. We furnish attractive show card, and make

Special Prices to the Trade

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The grease passes through it instantly and leaves the food light and tempting. Easily cleaned. Made entirely of steel. A firm, cool grip. Will last a life time. Costs no more than a poor one. Our catalog contains some 400 good things, and can be had for the asking. Risk a postal card on it anyway.

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THE LAW SAYS:

"FOOD MUST BE PURE" and the people demand Cooking Utensils that do not warp, scorch, burn or spoil that food. It means big business if you handle

"NEVER-BREAK"

Steel Spiders, Griddles and Kettles, advertised in the popular Magazines.

The Genuine branded "NEVER-BREAK." "Imitations fool the foolish."

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EXCLUSIVE MANUFACTURERS

PULLMAN
SASH BALANCES

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IN USE EVERY-WHERE

Send us your orders

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A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

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Write: "Please stop our ad. for Tinner. The first issue brought results."

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4-7

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Why You Should Use the Security Copper Tube Lightning Rod in Preference to Any Other:

1. It is constructed on the most scientific principles; receiving the highest award, diploma and medal from the Royal Academy of Science and Arts, Paris, France, April 30, 1897.
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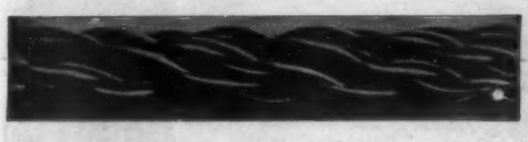
6. It is furnished with the most complete and best outfit of fixtures, points, balls and vanes.
7. It is sold by responsible business men, who see that it is properly put up and kept in repair.
8. It has never failed to afford perfect protection from lightning and gives general satisfaction in every respect.
9. The company is responsible and gives you a guarantee on the rods for twenty years, will refund all money received for the rods and pay $500 reward to find a building burned by lightning with their copper tube rods on in circuit form.
10. The above offer has been made for the past 14 years and the reward has never been claimed. This proves that our lightning rods are sure and perfect protection against lightning.

The Security Lightning Rod Co.,
BURLINGTON, WIS.



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We have the finest static machine now, something new and given to our agents FREE. Write to-day for Agency and territory. Our prices are right.

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GUARANTEED

Not simply a high sounding but meaningless string of words, neither an empty guarantee to give satisfaction, but a definite, absolute, binding guarantee that this paint will

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or paint for repainting is yours without charge.

That is the kind of guarantee we put on Pitkin's Barn Paint and it lives up to it too.

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Established 1868 BENTON HARBOR, MICH. Originators of Barn Paint

HELL Cannot be hotter than our No. 10

Noiseless, No Odor, No Smoke.
More Heat with Less Fuel.
Greatest Range of Heating.
3 to 12 lb.
Coppers Indoors or on a Roof.

Order of your Jobber, or we will ship direct for $6.50, on 30 days approval.

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LOCK-CORNER SHELF BOXES
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Blick No. 3 The Best Box
FOR RURAL FREE DELIVERY
$5.88 Per Dozen

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Improved Quick and Easy, Rising Steam, Electric and Hand Power.

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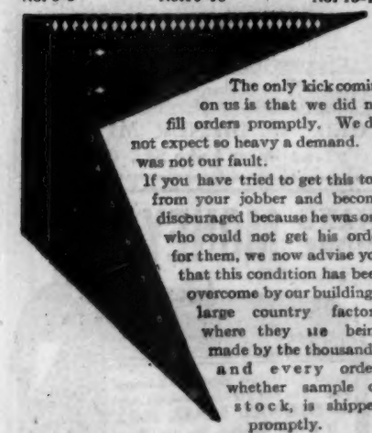
KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IOWA
Kimball Elevator Co., 139 Vincent St., Cleveland, O.

The NEW Universal Square

Is proving itself sure to become the Standard Tool of its kind.

Made in Three Sizes
No. 6-6" No. 10-10" No. 13-13"



The only kick coming on us is that we did not fill orders promptly. We did not expect so heavy a demand. It was not our fault.

If you have tried to get this tool from your jobber and become discouraged because he was one who could not get his order for them, we now advise you that this condition has been overcome by our building a large country factory where they are being made by the thousands, and every order, whether sample or stock, is shipped promptly.

So, Try, Try Again!

DUBY & SHINN MFG. CO., Inc.
Branchport Station.
Home Office and Works, LONG BRANCH, N. J.

H. WEISS & CO.

20 Cliff Street, NEW YORK

Skylight Gearing and Chain Lifts

Tinsmiths' and Plumbers' Tools

Cornice Makers' Tools

Coppersmith's Tools

Pipe Threading Machines

Second-Hand Goods Bough Sold and Exchanged

Punch, Shear and Bender Combined for ½" Iron

LEVER SHEAR.

This Lever Shear is made in seven sizes. It is a convenient tool for shearing plates, bars or angle iron. We build a complete line of Shears, Punches and Bending Rolls, all sizes, for hand or power

BERTSCH & COMPANY,
Cambridge City, Ind.

SOMETHING NEW But Well Proven. The Wagner Patent Elbow Shears for cutting tin furnace elbows. They are accurate, strong, durable and cheap. Others use them—so should you.

Write for prices and additional information.

Made by C. DeWITT WAGNER, Cedar Rapids, Iowa

U. S. Register Co., Battle Creek, Michigan, Agents for Michigan

These patterns of Slayd or Wood Carver's Knives have been adopted by the largest and most up-to-date Manual Training Schools in the United States and Canada. Write us for prices.

Smith & Hemenway Co.
108-110 Duane St., New York, N. Y.

TOOLS FOR SHEET METALS

Single and Double Look Edger.

INCLUDING

Tinners' and Roofers' Tools, Shears, Punches, Presses and Dies, Can-Making Machinery

MADE BY

NIAGARA MACHINE & TOOL WORKS, Buffalo, N. Y.

The Sincerest Flattery for the "Matchless" is the imitations which are to be found in the market.

The Matchless double-acting floor spring hinge is ball bearing. This insures a minimum of friction. The matchless operates easy and without noise.

They can be fitted to any door in Bank, Church, Vestibule or Pantry,

Send for our fully illustrated catalog and price list. Address Dept. A,

LAWSON MFG. CO.,
40 Dearborn Street, Chicago.
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It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades. Address

DANIEL STERN, 69 Dearborn St., Chicago

Goodell-Pratt Company
GREENFIELD, MASS., U.S.A.
HACK SAWS
FAMOUS FOR TEMPER AND CUT
HAND AND MACHINE BLADES OF ALL STANDARD LENGTHS AND WEIGHTS.
Catalogue Free

ASK YOUR DEALER FOR THE
Sem's
Soldering Furnace

AND YOU WILL MAKE NO MISTAKE

Always Ready—No Smoke—No Odor—No Noise—Unexcelled—Unequaled—Unrivaled—Safe—Sure—Durable.
GALVANIZED IRON, BRASS OR COPPER RESERVOIR.
Equipped with Cylindrical Slotted Burner.
MADE ONLY BY
BURGESS SOLDERING FURNACE CO.
COLUMBUS, OHIO, U. S. A.

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and the same time in one freezer — something entirely new, never done before.

"American Twin"

"Lightning"

"Blizzard"

THEY ARE
Well Advertised,
In Demand,
Easily Sold,
Satisfactory in Use,
Of Known Reputation.

THEY EXCELL IN
Easy Running,
Quick Freezing,
Economy,
Convenience,
Practical Results.

THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work

Sold by leading jobbers. Catalog sent free.

North Bros. Mfg. Co., Philadelphia

Magic Pattern Rule Will Lay Out Patterns

For any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammel. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction.

Price, complete in a nice Wooden box with Chart, $4.00 net cash

LUFKIN RULE CO., SAGINAW, MICHIGAN (Mention THE AMERICAN ARTISAN)

AKRON ECLIPSE LEVELS

All glasses in Akron Eclipse Levels are carried on elastic bearing and enclosed in heavy glass tubes and are almost unbreakable.

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Pressed Steel Shelf Brackets

BUTT HINGES
Barn Door Hangers and Track

Our Planished Steel STRAP and T HINGES are now all made on Automatic Machinery—Every one is as true as a Die.
Our BUTTS are unequalled in Workmanship and Finish, All our Goods Guaranteed—BEST IN THE WORLD.
(And they cost no more.)

THE GRIFFIN MFG. CO., - Erie, Pa.

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AGATE NICKEL-STEEL WARE

AGATE L&G Mfg. Co. NICKEL-STEEL-WARE

Is absolutely free from poisonous substance, is made by careful, experienced men, by a company founded in 1850. The first enameled ware and blue and white ware made in this country was made in our mills. We know how to make enameled ware safe and durable. We make it safe and durable because we are proud of the trade mark. Look for the blue label.

Lalance & Grosjean Mfg. Co.

CHICAGO, NEW YORK BOSTON

Seamless Non-Leak Pyrolite Ware

Qua duple-Coated White Lined
Durability and Finish Unsurpassed
Shape Scientifically Correct and Assortment Unequalled

Noteworthy features: Rivetless Seamless Spouts and Lips on Tea Kettles, Tea Pots, Coffee Pots, etc. Positively **without** a seam and therefore **absolutely Non-Leak.**

Open Stock Plain Turquoise at New York

The demand for **Good** Enameled Kitchen Ware is **insistent** and **increasing.** Particularly when your customers **hold you personally responsible.**

Seamless Pyrolite Samples on request; no obligation, Catalog No. 5.

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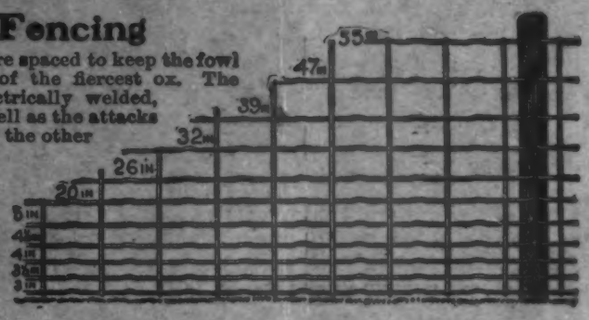
"Pittsburgh Perfect" Fences

For Field, Farm and Hog Fencing

are made to meet all the demands they are subject to. They are spaced to keep the fowl within their limits and are calculated to stand the strength of the fiercest ox. The wires and rods are of the best steel the market affords, electrically welded, and are galvanized so that they can resist the elements as well as the attacks of the curbed in animals. They are just as meritorious as all the other



"Pittsburgh Perfect" Brands

of Wire Rods, Annealed, Bright and Galvanized Smooth Wire, Barb Wire, Twisted Cable Wire, Fence Staples, Wire Nails, Steel Hoops, Bands and Cotton Ties. Dealers save money on goods.

MANUFACTURED BY

The Pittsburgh Steel Co., Pittsburgh, Pa.

DISSTON **CHROMOL** HACK SAW BLADE

Made of Chromol Steel—A special high grade material peculiarly suited for metal cutting blades. The Teeth are MILLED in—making them clean and sharp, giving greatest possible strength. Hardened throughout underDisston Special Process.

Taking the CHROMOL SAW day in and day out, we guarantee it will DO more satisfactory work than any other hack saw on the market.

Made under DISSTON BRAND only.

HENRY DISSTON & SONS, Inc.

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Stevens Rifle Telescopes

The Bull's-Eye as viewed through a ***Stevens Telescope*** is simply an image of Bull's-Eye—not the real Bull's-Eye. The image of Bull's-Eye is formed at spot where the cross hairs are laid making the two coincident—both equally distinct.

The middle aged or elderly person in using the ordinary sights can, perhaps, see the Bull's-Eye distinctly and the sights, **but not both together,** as one or the other will blur. If he concentrates his mind on the sight of the rifle, the Bull's-Eye becomes blurred, and if he concentrates his mind on the Bull's-Eye, the sight becomes blurred. This is owing to the lack of accommodation which affects every person aged from forty years up.

Stevens' Scopes Make Old Eyes Young Again

Full data and illustrations concerning the famous ***Stevens Telescope*** will be found in **Special Telescope Catalog. Send for it.** With a ***Stevens Telescope*** **the veteran can compete with the youngest shooter without a handicap.**

J. Stevens Arms & Tool Co.

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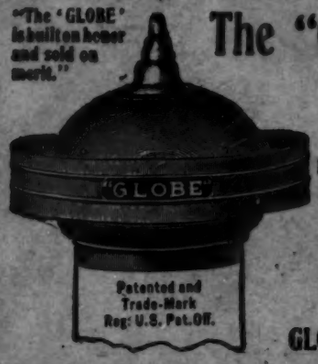
THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size, and bead, and the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit."



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes

Absolutely Storm Proof

For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character

SMOKY CHIMNEYS CURED

"GLOBE VENTILATED RIDGING"

Send for Pamphlet

Manufactured by

GLOBE VENTILATOR CO., Troy, N.Y.

The ECLIPSE Nested Stove Pipe Thimble

Saves 80 per cent of room.
Stronger than a hand-made riveted thimble.
Always Ready to hook together.
The Lug is always on top and passes through two slots then tied. Does not interfere with the entering stove pipe.

The ECLIPSE Nested Stove Pipe Thimble is made of Galvanized Iron in sizes of 5, 6 and 7 inch.
Manufacturers of Pierced Tinware and all styles Flour Sifters.

STUBER & KUCK, - Peoria, Ill.

Well, What Do You Think of That

AN AMERICAN ROOFING PLATE
With a Genuine
HAMMERED OPEN HEARTH BASE

SCOTT'S EXTRA COATED

Is made EXCLUSIVELY with this BASE, and it was THIS MATERIAL that made THE BEST of the OLD IMPORTED PLATES SO JUSTLY NOTED for their DUCTILITY and REMARKABLE WEARING QUALITIES.

FOLLANSBEE BROS. CO.

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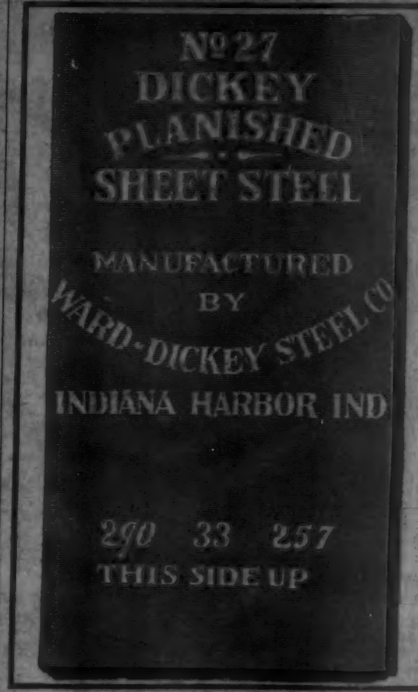

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Soft Tough

HOLDS COLOR UNDER LONG AND HIGH HEATS :: ::

No Breakages

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Inquire of Daniel Stern,
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Technologist

Vitreous Enameling

Designs and builds new plants. Improves quality and reduces cost in those already established.

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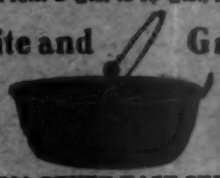
PRESERVING SEASON IS HERE

WE MAKE PRESERVING KETTLES
From 2 Qts. to 18 Qts., in

Blue and White and Enameled



Gray Mottled Ware

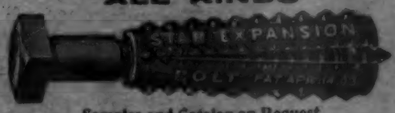
ALSO OVER 500 OTHER FAST SELLING ITEMS

Star ★ Enameling & Stamping Co., PITTSBURGH, PA.

STAR EXPANSION BOLTS

ALL KINDS

WE MAKE EXPANSION PARTS TO FIT THE BOLTS AND SCREWS YOU HAVE IN STOCK



ANYTHING TO FIT FROM THE SMALLEST WOOD SCREW TO THE LARGEST LAG OR MACHINE

Samples and Catalog on Request

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By advertising and using
THE Powers Automatic Chimney Tops

They make chimneys draw, give tinners' employment making stocks and give the dealers profit.

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Made only by **POWERS BROS.** Streator, Ill.

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THE "CENTENNIAL" RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit Corrugated and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Patent applied for.

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